

**JAMES MADISON UNIVERSITY**  
**FLOOD EMERGENCY RESPONSE PLAN**

<http://www.jmu.edu/safetyplan/flood/>

Should faculty, staff, students, or associates discover water **leaking or flooding** a campus building and an emergency situation has not been announced they should do the following:

- Identify the exact location of the water source
- Call in the problem:
  - Weekday work hours call: Work Control, 568-6101
  - Evenings, weekends, and holidays call Campus Police, 568-6911
- Keep everyone out of the water, there is a danger of trip hazards and electrocution if the power is live
- Alert the building coordinator who should:
  - If the water is coming from above – move or cover personal property with water proof materials
  - If water is coming from below – begin moving property to higher ground
- Once evacuated, buildings may not be entered until the campus emergency coordinator determines the area safe

**Dealing with Flooding on JMU's Campus**

Never wander, drive or allow others into a swollen stream since you cannot know where the natural stream bank drops off, or what erosion has taken place. If caught outside, stay on high ground. In addition, water levels may have reached electrical transcloser boxes or overhead electric service may be down, charging areas with electrical current. Therefore, avoid wading through high water in parking lots, streets and intersections. One area of special concern is the intersection of Duke and Bluestone at the traffic light and railroad crossing by Mr. Chip's convenience store. If flash flooding occurs during a spring or summer storm, avoid the novelty of wading around new bodies of water - due to quick wash out erosion, they may be deeper than you realize and unnoticed water currents may carry you off after footing has been lost causing drowning or battering injuries. Facilities Management and JMU Campus Police will act to barricade regular crossing points with the potential for fast moving water to prevent access by the public.

## **James Madison University Flood Water Plan**

**A number of areas on the James Madison University campus are subject to flash floods, typically caused by sudden, excessive rainfall that sends the campus streams rapidly out of their banks. Often this occurs in a short amount of time, over several hours or even less. Campus flood prone areas include but are not limited to the low-lying land around Newman Lake, Blacks Run, Sibert Creek, and the Arboretum basin and its drainage to Newman Lake. This document provides plans for dealing with specific buildings and campus areas include:**

In the event of flooding at [Newman Lake](#):

Emergency Notification/Action Plan Relative High Water in Newman Lake

In the Event of Flooding at [Mr. Chips Convenience Store](#)

In the event of flooding at the [Cardinal House](#)

In the event of flooding at the [JMU Book Store](#)

In the event of flooding at the [Greek Row Residence Halls](#)

In the event of flooding in the [Studio Center and 131 West Grace Street](#)

In the event of flooding in [Godwin Hall](#)

In the event of flooding in [Plecker Athletic Performance Center](#)

In the event of flooding in [Champions Drive Parking Deck](#)

In the event of flooding in [Sonner Hall](#)

In the event of flooding in [Bridgeforth Stadium](#)

# **James Madison University**

## **Flood Water Plan**

### **Flooding - Dealing with flooding on JMU's Campus**

The University Police will monitor weather reports for flood watches and warnings. With the advent of flooding due to torrential rains, considerable snowmelt runoff induced by a quick thaw, or posting of a flood watch by the National Weather Service, Public Safety Dispatch, JMU Police 8-6913/6911 shall notify:

- The Emergency Response Team Coordinator – Director of Public Safety
- Facilities Management Operations (8-6341/6885), to activate their Storm Water Management – PROCEDURE NO.: 1V:10:  
[http://facmgt.jmu.edu/web/engineering/stormwater/index\\_html/](http://facmgt.jmu.edu/web/engineering/stormwater/index_html/)
- Landscaping Services (8-7963)
- Damage Assessment and Mitigation - Flood Emergency Response Teams under the direction of the assistant Emergency Response Team Coordinator – the university's safety coordinator

Public Safety Dispatch will notify the following:

- Parking Services (8-3300)
- JMU Bookstore (8-6121)
- JMU Dining Services (8-3663)
- Student Affairs (8-7576)
- Office of Residence Life (8-6468)
- JMU Athletics (8-8810)
- Academic Affairs (8-7899)
  - Cardinal House
  - Studio Center - 130 West Grace Street
  - 131 West Grace Street
  - Godwin Hall
  - Sonner Hall

## James Madison University Flood Water Plan

- Affected building coordinators:

Name of Building	Address	Building Coordinator	Secondary Contacts
130 & 131 W. Grace	130 & 131 W. Grace	Paula Miller	Jini Cook
Cardinal House	500 Cardinal	Sushil Mittal	Deborah Sagron-Hyland
Godwin Hall	261 Bluestone Dr.	Ty Phillips	
Lake Cluster	1251 Greek Row	Holmes Browne	
Champions Drive Parking Deck	381 Champions Dr	Bill Yates	
Mr. Chips Convenience Store	190 Bluestone Dr.	Dwight Campbell	
Plecker Athletic Performance Center	371 Bluestone Dr.	Ty Phillips	
Sonner Hall	481 Bluestone Dr.	Ellen Hedrick	
University Bookstore	211 Bluestone Dr.	Steve Mark Glenn	

The building coordinators and the supervisors of these operations will monitor conditions and taking appropriate action as necessary, as tasked in their Flood Emergency Response Plans. University police will alert these operations as conditions change with, predicted flood levels, current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100-year flood threat level), individual building flood plans will be activated; with responsibility for closing operations remaining solely with the **Campus Emergency Coordinator**. The plans include but are not limited to Cardinal House, Mr. Chips, The Studio Center, and 131 West Grace Street. Should the flood threat be heightened to the FLOOD WARNING (at the 500 year flood threat) level, the building warning level should be expanded to include The JMU Bookstore, Godwin Hall; the Greek Row Residence Halls buildings B, C, D; Champions Drive Parking Deck; Plecker Athletic Performance Center and Sonner Hall. The individual building flood plans should include making advanced arrangement to evacuate all operations and all furnishings from the effect areas or at a minimal to elevate material above the predetermined flood level. The Director of Facilities Management or the acting representative makes the decision to proceed with opening the gates of the dam containing Newman Lake and reducing the lake level in advance of a flood, including how low to drop the lake, mitigating flooding around Sibert Creek and Newman Lake. The primary areas of concern for flooding include:

## **James Madison University Flood Water Plan**

- The most common area of flooding on campus is the Sibert Creek Flood Plain - the areas on either side of the tributary of Sibert Creek running parallel to Duke Drive and the Norfolk Southern tracks. This includes:
  - The bus stand in the Godwin lot
  - The intersection of Duke and Bluestone
  - Mr. Chips convenience store
  - The Godwin lot
  - The north grand stands at Bridgeforth Stadium
  - The west shore, Newman Lake, by Greek row
- The tunnel under Interstate 81 (Duke Dog Alley) connecting the east and west campuses. This is a particularly vulnerable location, especially in flash flooding, especially when the volume of water run-off is significant. See the Procedures Specific for the Pedestrian Tunnel under I-81 found below
- The Newman Lake Area: The JMU Bookstore; Godwin Hall; the Greek Row Residence Halls - buildings B, C, D; Champions Drive Parking Deck; Bridgeforth Stadium and Sonner Hall Plecker Athletic Performance Center.
- The Arboretum drainage basin including the Plecker Arboretum Education Building, Arboretum support structure, and the floodway running from the Arboretum pond to Newman Lake
- Areas on either side of the tributary of Black's Run running parallel to and between High Street and the Norfolk Southern tracks including the Studio Center and 131 West Grace Street
- The "C-1" commuter parking lot located off of Grace Street, across from the Facilities Management complex
- Parking facilities along southern Harrison Street
- The "College Farm" near Port Republic is also a concern for flooding. Camping is prohibited at the "farm" primarily because anyone camping by the river bank could be caught unaware by flooding originating from heavy storm upstream

Once a flood threat has been determined, the University Police and other university operational staff will monitor such areas and warn people away. JMU-PD will contact Harrisonburg Transit office (432-0492/0491) to modify bus routing away from and around such areas. Notify the Harrisonburg office of the Norfolk Southern Railroad (434-7351/5547) of the impending or actual flooding locations (for potential track roadbed erosion or washout). The 24 hour numbers for the railroad are (800)831-6458 (Shenandoah) and (540)981-4739 (Roanoke).

## **James Madison University Flood Water Plan**

Notice of anticipated or impending flooding will be transmitted by means of the following:

- JMU AM1610 low power radio
- The multi-frequency two-way radio system simulcast (includes among others Police, Admin, Grounds frequencies)
- Critical numbers on the emergency telephone "tree," (Media Relations, Web Alert, Events & Conferences, Office of Residence Life, Athletics [Convo Center], UREC, Off Campus Life), e-mail alert

The JMU Police Communications Dispatcher will conduct a Multi-Frequency broadcast over all JMU two-way radio frequencies whenever any Inclement Weather/Severe Storm/Flood WARNING and/or WATCH. They will communicate the campus emergency status as an ALERT and read the broadcast over the air to all JMU departments and personnel that utilize JMU Licensed Radio Frequencies.

Personnel drawn from Parking, UREC, Police and/or Landscaping Services will be posted at safe locations near areas related to potential flooding; stopping people from using the effected infrastructure during times of flooding. Any such personnel must have two-way radios capable of transmitting on not only their respective "primary" frequencies, but also the general "Admin" frequency.

Police Dispatcher(s) will alerted as to flood conditions and attendant hazards at the I81 tunnel and other areas subject to flooding by high use of effected infrastructure centers such as, but not limited to, UREC, Convocation Center, Events & Conferences and the Office of Residence Life. They in turn will activate their internal notification "trees." The UREC and Convo staff will redirect persons departing their respective buildings to exits leading to safe routes for evacuation.

All extended hour (front desk) telephone numbers will be supplied to and periodically updated for Public Safety through its police dispatchers (8-6913 or 6911) with attention to the Director, the Chief of Police, and the Technical Services Commander so that they can be included with these complete and comprehensive flood response "procedures." Currently those critical numbers are:

- Facilities Management:
  - Director Mike Davis (8-6575)
  - Work Control Center Day and Night Shift (8-6101)
- Assistant Director John Ventura (8-6341), [venturjr@jmu.edu](mailto:venturjr@jmu.edu) - Facilities Management Operations Manager 8-6341
  - JMU Landscaping Services (8-7963)

## James Madison University Flood Water Plan

- Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
- Building Automation Manager (83337) HVAC
- Power Plant Manager (8-6905) steam-heat
- The "Timely Notification" e-mail tree (8-6769 [PD\\_DISPATCH@jmu.edu](mailto:PD_DISPATCH@jmu.edu))
- Campus-wide e-mail messaging (Information Technology/Technical Services 8-7063/3904)
- Web Alert (8-3720 David Taylor, 8-3474/3621/1201 Media Relations)
- JMU AM1600 low power informational radio station (8-3474/8-3621/8-3720)
- Events & Conferences (8-3606/8-6330)
- Office Residence Life (8-3501/6275)
- Athletics Operations office Convocation Center (8-8196/8-3930/-8-8036)
  - Athletics Administration office Godwin Hall (8-6164)
  - Facilities , Game Management and Events (8-8810)
- University Recreation Center (8-8700)
- University Information desks
  - The Festival and Student Center (8-2592/8-2593)
  - Taylor Hall Down Under (8-7553/8-2806)
  - Warren Hall (8-6138/8-7986).

Key people involved in the periodic review and updating of these procedures are:

- Tara Armentrout [armentts@jmu.edu](mailto:armentts@jmu.edu) - Manager of Parking Services 8-3382
- Roy Cardin [cardinrl@jmu.edu](mailto:cardinrl@jmu.edu) - Manager of Landscaping Services 8-7963
- Scott Coverstone [coverscs@jmu.edu](mailto:coverscs@jmu.edu) - University Police 8-7973
- Bob Golson [golsonrm@jmu.edu](mailto:golsonrm@jmu.edu) – Associate Director for Facilities and Operations 8-8717/8-8700
- Stephanie M Hoshower [hoshowsm@jmu.edu](mailto:hoshowsm@jmu.edu) Director of Dining services, 568-2887
- Frank Lucas [lucascf@jmu.edu](mailto:lucascf@jmu.edu) - Assistant Supervisor of Landscaping Services 8-3411
- Dr. James McConnel at [mconnjw@jmu.edu](mailto:mconnjw@jmu.edu)- Dean of Students 8-3550
- John J Rheault [rheauljj@jmu.edu](mailto:rheauljj@jmu.edu) – District Manager Follett Higher Education Group, 568 6121
- Lee Shifflett [shifflla@jmu.edu](mailto:shifflla@jmu.edu) - University Police Chief 8-6764
  - Mack Moore [mooremg@jmu.edu](mailto:mooremg@jmu.edu) – Risk Management Coordinator, 568-7812
  - Tony Brown [brownah@jmu.edu](mailto:brownah@jmu.edu) – Campus safety coordinator, 568-6765
- John Ventura [venturjr@jmu.edu](mailto:venturjr@jmu.edu) - Facilities Management Operations Manager 8-6341

**James Madison University  
Flood Water Plan**

**Emergency Notification/Action Plan for Relative High Water  
in Specific Areas of Campus and Campus Buildings**

In the event of flooding at [Newman Lake](#):

Emergency Notification/Action Plan Relative High Water in Newman Lake

In the event of flooding on [Greek Row](#):

Emergency Notification/Action Plan Relative High Water in Newman Lake

In the Event of Flooding at [Mr. Chips Convenience Store](#)

In the event of flooding at the [Cardinal House](#)

In the event of flooding at the [JMU Book Store](#)

In the event of flooding at the [Greek Row Residence Halls](#)

In the event of flooding in the [Studio Center and 131 West Grace Street](#)

In the event of flooding in [Godwin Hall](#)

In the event of flooding in [Plecker Athletic Performance Center](#)

In the event of flooding in [Champions Drive Parking Deck](#)

In the event of flooding in [Sonner Hall](#)

In the event of flooding in [Bridgeforth Stadium](#)



# **James Madison University Flood Water Plan**

## **Newman Lake Flooding Emergency Notification/Action Plan for Relative High Water in Newman Lake**

Food water threatening to overflow Newman Lake, which occurs with a flood threat in excess of two feet, should activate the Flood Emergency Action Plan for the following building in the JMU Greek Row area of campus:

Building B, 1190 Greek Row Drive

Building C, 1150 Greek Row Drive

Building D, 1100 Greek Row Drive

### **Contributing factors in Newman Lake exceeding its banks and flooding surrounding areas include but are not limited to the following:**

1. Newman Lake is served by a tributary of Sibert Creek which in turn drains a watershed area northeast of the campus (area boxed by East Market Street, University Blvd., Reservoir Street, and I-81) as well as the west and CISAT campuses. Down stream of the Newman Lake dam, the tributary joins Black's Run in the Purcell Park.
2. The lower "flood plain" starts below the toe of the dam and includes the University's lower "R2" lot, the residential neighborhood served by Butler and Monument Avenues, Purcell Park, and even JMU leased facilities on the east side of South Main across from Duke's Plaza. Run-off from areas east of I-81 south of Port Republic Road, through culverts under I-81 adjacent to the Squire Hill complex affects this flood plain.
3. When high water conditions on Newman Lake and flash flooding on campus is expected the sluiceway door on the Newman Lake damn can be opened to relieve pressure on the dam at the overflow weir. The sluiceway door will be open periodically to evacuate residual build-up of silt and maintain an open bottom channel for unobstructed flow.
4. JMU-PD will notify both Harrisonburg city officials and the residents of dwellings in the Monument/Butler Avenue areas if high water conditions whenever the water overflow level reaches a point one foot or higher on the overflow weir staff gauge or when seepage develops in the homogenous earthen fill. Seepage has the potential to undermine the dam.

# **James Madison University Flood Water Plan**

## 6. Notification List, Officials:

Harrisonburg Fire Department 434-6452 or 911  
Harrisonburg Police 434-2545 or 911  
Harrisonburg Parks & Recreation 433-9168  
Virginia Division of Soil and Water Conservation (540)332-9991  
Virginia State Police 434-8593/(800)572-2260  
Virginia Department of Transportation Highway Office 434-2586

Current names, telephone numbers, and street addresses of residents of Butler and Monument Avenues are all in the up-to-date "City Directory."

## **Storm Water Management Plan**

PROCEDURE NO.: 1V:10

DATE: May 18, 2001

SUPERSEDES PROCEDURE NO.: IV:10  
dated: 13 July 1999

SUBJECT: Stormwater Management Maintenance

APPROVED: G. Mike Davis, Director G. Mike Davis

### 1. PURPOSE

The purpose of this procedure is to establish guidelines for the maintenance of stormwater management facilities installed on campus.

### 2. DEFINITIONS

Stormwater Management Facility - a device that controls stormwater runoff and changes the characteristics of that runoff, including but not limited to, the quantity and quality, the period of release, or the velocity of flow.

### 3. RESPONSIBILITIES

## **James Madison University Flood Water Plan**

1. Director of Facilities Management is responsible for the overall implementation of this procedure.

2. Assistant Director of Facilities Management for Operations and/or Service Managers are responsible for ensuring that stormwater management facilities are properly inspected and maintained in accordance with this plan and shall issue periodic or repetitive work orders for specific inspections as necessary.

3. Project Manager is responsible for ensuring that stormwater management facilities are installed in accordance with the Department of Conservation and Recreation requirements.

4. Engineering Manager is responsible for submitting the annual report.

### **4. PROCEDURE**

1. The inspection and maintenance of storm water management facilities shall be in accordance with Virginia Storm water Management regulations.

2. Each storm water management facility shall be inspected on a semi-annual basis and after any storm that causes the capacity of the facility to be exceeded. The Project Manager shall initiate a scheduled work order upon the completion of construction to accomplish this inspection. The inspection shall include the following items as a minimum:

1. Clean facility as necessary to maintain design volumetric capacity.

2. Inspect facility inlets and outlets for any blockages and clean as necessary.

3. Inspect facility structures for any signs of deterioration and correct as necessary. Special attention to the Newman Lake spillway: Operate spillway gate three times annually to assure proper function. When ground is saturated and additional and/or significant precipitation is expected, the spillway water gate shall be opened and the lake surface level lowered in anticipation of exceptional surface water run-off from watershed areas above the lake.

4. Note all inspection findings, date, name, and location on the inspection work order.

## **James Madison University Flood Water Plan**

3. The Engineering Manager shall submit an annual report to the Department of Conservation and Recreation, Division of Soil & Water Conservation Regional Office. The report shall include the following information:

1. Location
  2. Number and type of stormwater management facilities installed during the preceding year and their storage capabilities
  3. The affected waterbody, watershed or basins
  4. Summary of any water quality monitoring data associated with these facilities.
  5. A copy of this report will be kept in the Engineering Department file
4. This procedure shall be reviewed annually

### **In the Event of a Threat of Flooding on Greek Row**

If flooding of Greek Row Residence Halls is eminent the JMU Chief of Police or his/her representative will work with the Office of Residence Life's Building Manager to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

The Flood Emergency Response Plans tasks building coordinators and supervisors of operations in buildings in this area with monitoring conditions and taking appropriate action as necessary. JMU-PD will alert these operations should conditions change: including predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100-year flood threat), level, individual

## **James Madison University Flood Water Plan**

building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to the Greek Row Residence Halls, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of Greek Row Residence Halls, implementing the following procedure:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Greek Row Residence Halls
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.

## **James Madison University Flood Water Plan**

- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus

## **James Madison University Flood Water Plan**

- Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support

**Should floodwater exceed the two feet in excess of flood stage level or should additional flooding be projected the Emergency Coordinator, at his desecration, will call for full activation of the Flood Emergency Action Plan including but not limited to the flowing:**

- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response

## **James Madison University Flood Water Plan**

- Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
- Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
- Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepare and submit a report to the President and Executive Vice President apprising them of the outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan



## **James Madison University Flood Water Plan**

- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **JMU-PD will do the following if floodwaters are found in, any of the Greek Row building:**

- If flood water is found in Greek Row Residence Halls the dispatcher will once again contact appropriate Office of Residence Life personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Greek Row Residence Halls and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:

## **James Madison University Flood Water Plan**

- Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
- Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
- Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
- Check all tanks for leaks
- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

### **Contributing factors in Newman Lake exceeding its banks and flooding surrounding areas include but are not limited to the following:**

1. Newman Lake is served by a tributary of Black's Run which in turn drains a watershed area northeast of the campus (area boxed by East Market Street, University Blvd., Reservoir Street, and I-81) as well as the west and CISAT campuses. Down stream of the Newman Lake dam, the tributary joins Black's Run in the Purcell Park. Black's Run enters Purcell Park contiguous to the Yellow Cab headquarters and Wendy's restaurant on South Main.

2. The lower "flood plain" starts below the toe of the dam and includes the University's lower "R2" lot, the residential neighborhood served by Butler and Monument Avenues, Purcell Park, and even JMU leased facilities on the east side of South Main across from Duke's Plaza. The flood plain also is affected by run-off from areas east of I-81 south of Port Republic Road, through culverts under I-81 adjacent to the Squire Hill complex.

## **James Madison University Flood Water Plan**

3. With the commercial development of areas north and east of campus, flash flooding on campus, with resultant high water conditions on Newman Lake, is to be expected. In the event of flooding or whenever flooding is anticipated the sluiceway door can be opened to relieve pressure on the dam at the overflow weir. The lake has been subject to silting from construction run-off. The sluiceway door is to be opened periodically to evacuate residual build-up of silt and maintain an open bottom channel for unobstructed flow.

4. The backwater trap between the toe downstream of the dam and the triple box culvert beneath Port Republic Road can accommodate a significant amount of overflow from Newman Lake. The fill and embankment of the southbound I-81 exit serving Port Republic Road has been re-enforced with cemented rip-rap and can withstand considerable water pressure and flow volume. The downstream restriction posed by the Port Road embankment and the disbursement of water in the marsh south of the lower "R2" lot has a significant "knock down" effect on the velocity of the water flow. But, expansion of the "R2" lot has added to the potential "run-off."

5. Overflow of the dam has become more frequent due to the "silting" of the lake. Both Harrisonburg city officials and the residents of dwellings in the Monument/Butler Avenue areas should be notified if high water conditions are anticipated. Notification should be initiated whenever the water overflow level reaches a point one foot or higher on the overflow weir staff gauge or when seepage develops in the homogenous earthen fill. Seepage has the potential to undermine the dam.

### 6. Notification List, Officials:

Harrisonburg Fire Department      434-6452 or 911  
Harrisonburg Police      434-2545 or 911  
Harrisonburg Parks & Recreation      433-9168  
Virginia Division of Soil and Water Conservation      (540)332-9991  
Virginia State Police      434-8593/(800)572-2260  
Virginia Department of Transportation Highway Office      434-2586

Current names, telephone numbers, and street addresses of residents of Butler and Monument Avenues are all in the up-to-date "City Directory."

## **James Madison University Flood Water Plan**

### **In the Event of Newman Lake Flood Waters Exceeding the 100 year flood stage:**

When Newman Lake waters threaten to exceed the 100 year flood stage the Flood Emergency Response Plans for the following buildings will be activated: The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall.

If flooding of The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall is eminent the JMU Chief of Police or his/her representative will work with the ARAMark District Manager to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from Newman Lake patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of these buildings. If it appears Newman Lake waters threaten to exceed the 100 year flood stage, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall the dispatcher will once again contact appropriate convenience store personnel and so advise

## **James Madison University Flood Water Plan**

- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall building, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall building and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency

## **James Madison University Flood Water Plan**

- The dispatcher will contact appropriate staff using the alarm contact list for The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall buildings
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.
  - Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
  - Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
  - Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
  - Prepare to identify/develop and equip emergency shelters in campus facilities.
  - Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or

## **James Madison University Flood Water Plan**

- renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.

## **James Madison University Flood Water Plan**

- Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
- Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
- Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
  - Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
  - Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.



## **James Madison University Flood Water Plan**

- Insures that appropriate notification is made to off campus staff when necessary.
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

## **James Madison University Flood Water Plan**

**If floodwaters are found in The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall building dispatch will:**

- If flood water is found in Greek Row Residence Halls the dispatcher will once again contact appropriate Office of Residence Life personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around The JMU Bookstore, Godwin Hall and the Champions Drive Parking Deck, the Plecker Athletic Performance Center and Sonner Hall and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks

## **James Madison University Flood Water Plan**

- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

### **In the Event of Flooding at Mr. Chips Convenience Store**

## James Madison University Flood Water Plan

If flooding of Mr. Chips is eminent the JMU Chief of Police or his/her representative will work with the ARAMark District Manager to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from the stream adjacent to the Mr. Chips convenience store (corner of Bluestone and Duke at the railroad crossing), patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround Mr. Chips and concurrently flood the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Mr. Chips
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Mr. Chips the dispatcher will once again contact appropriate convenience store personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Mr. Chips and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinator and supervisor of operations in this building will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an

## **James Madison University Flood Water Plan**

approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Sibert adjacent to the Mr. Chips building, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of the Mr. Chips building and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for the Mr. Chips building
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.

## **James Madison University Flood Water Plan**

- Prepare to furnish emergency power and lighting systems, as required.
- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services

## **James Madison University Flood Water Plan**

- Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators forliaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post

## **James Madison University Flood Water Plan**

- Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
- Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan



## **James Madison University Flood Water Plan**

- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in the Mr. Chips building dispatch will:**

- If flood water is found in Greek Row Residence Halls the dispatcher will once again contact appropriate Office of Residence Life personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Mr. Chips and the nearby street intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:

## James Madison University Flood Water Plan

- Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
- Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
- Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
- Check all tanks for leaks
- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

# **James Madison University Flood Water Plan**

## **In the event of flooding at the Duke Alley Tunnel**

Procedures Specific for the Pedestrian Tunnel under I-81

Special attention will be paid to the I-81 pedestrian tunnel by Public Safety, Parking, and Facilities Management Personnel.

Signs (will be) permanently posted at each tunnel portal, at the threshold of the "Tunnel" lot, at the top of the steps leading from the "Village" (at Carrier Drive) to the west portal of the Tunnel giving notice that the Tunnel and the Tunnel lot are subject to flooding and attendant swift running water.

In advance of anticipated flooding secure gates or set barricades east and west of the tunnel portals at locations set back from either end where they will not be subject to erosion or being carried away by flood waters.

Personnel drawn from Parking, UREC, Police and/or Landscaping Services will be posted at safe locations near either end of the tunnel to monitor and report on changing conditions related to potential flooding as well as stop people from using the tunnel during times of flooding. Any such personnel must have two-way radios capable of transmitting not only on their respective "primary" frequencies, but also the general "Admin" frequency.

High tunnel use centers such as, but not limited to, UREC, Convocation Center, Events & Conferences and the Office of Residence Life will be contacted by the Police Dispatcher(s) and will be alerted as to flood conditions and attendant hazards at the tunnel and other areas subject to flooding. They in turn will activate their internal notification "trees." The UREC and Convo staff will redirect persons departing their respective buildings to exits leading to safe routes for evacuation.

# James Madison University

## Flood Water Plan

### In the Event of Flooding at Cardinal House

If flooding of Cardinal House is eminent the JMU Chief of Police or his/her representative will work with the Cardinal House Building Coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from the stream adjacent to the Cardinal House (corner of Paul Street and Duke at the railroad crossing), patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround Cardinal House and concurrently flood the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Cardinal House
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Cardinal House the dispatcher will once again contact appropriate convenience store personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Cardinal House and the nearby intersection for several reasons:

## **James Madison University Flood Water Plan**

- Submerged objects that could cause trips, falls, and/or cutting of feet
- To prevent people from being swept downstream in the swift running waters
- To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Sibert adjacent to the Cardinal House, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of the Cardinal House and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Cardinal House
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC

## **James Madison University Flood Water Plan**

- Power Plant Manager (8-6905) steam-heat
- Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
- Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
- Prepare to obtain the assistance of utility companies as required for emergency operations.
- Prepare to furnish emergency power and lighting systems, as required.
- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as

## **James Madison University Flood Water Plan**

possible.

- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency

## **James Madison University Flood Water Plan**

- Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
  
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
  - Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
  - Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
  - Insures that appropriate notification is made to off campus staff when necessary.
  - Performs other related duties as may be directed by virtue of the campus emergency.
  - In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepare and submit a report to the President and Executive Vice President apprising them of the final outcome of the emergency.
  - Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
  - Notifies University's Director of Facilities Management and administrators of major emergencies
  - Monitors campus emergency warning and evacuation systems
  - Takes immediate and appropriate action to protect life and property; to safeguard records as necessary



## **James Madison University Flood Water Plan**

- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in the Cardinal House building dispatch will:**

- If flood water is found in the Cardinal House the dispatcher will once again contact appropriate Office of Residence Life personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around the Cardinal House and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as

## James Madison University Flood Water Plan

possible:

- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks
  - Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

# **James Madison University Flood Water Plan**

## **In the Event of Flooding in the JMU Book Store**

If flooding of the JMU Book Store is eminent the JMU Chief of Police or his/her representative will work with the Follett Education Group's Store Manager and District Manager to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from Sibert Creek adjacent to the JMU Book Store, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround the building and concurrently flood the first floor, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for the Book Store
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in the Book Store the dispatcher will once again contact appropriate convenience store personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around the Book Store and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as

## **James Madison University Flood Water Plan**

conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Sibert adjacent to the the Book Store, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of the Book Store and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for the Book Store
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.

## **James Madison University Flood Water Plan**

- Prepare to furnish emergency power and lighting systems, as required.
- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services

## **James Madison University Flood Water Plan**

- Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post

## **James Madison University Flood Water Plan**

- Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
- Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as require
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan

## **James Madison University Flood Water Plan**

- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in the Book Store building dispatch will:**

- If flood water is found in the Book Store the dispatcher will once again contact appropriate Book Store personnel, this should include, Follett Education Group’s Store Manager and District Manager, and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around the Book Store and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:



## James Madison University Flood Water Plan

- Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
- Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
- Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
- Check all tanks for leaks
- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

# **James Madison University**

## **Flood Water Plan**

### **In the Event of Flooding of the Studio Center and 131 West Grace Street**

If flooding of the Studio Center and 131 West Grace street is eminent the JMU Chief of Police or his/her representative will work with the Studio Center and 131 West Grace building coordinator the Director of the Director of Art ad Art History, the safety coordinator for Art and Art History and the Occupational Therapy Program Director to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from the Black's Run adjacent to the Studio Center and 131 West Grace, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround the Studio Center and 131 West Grace, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for the Studio Center and 131 West Grace
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in the Studio Center and 131 West Grace the dispatcher will once again contact appropriate convenience store personnel and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building

## **James Madison University Flood Water Plan**

- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around the Studio Center and 131 West Grace and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Black's Run adjacent to the the Studio Center and 131 West Grace, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of the Studio Center and 131 West Grace and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for the Studio Center and 131 West Grace
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to

## **James Madison University Flood Water Plan**

- Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.
  - Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
  - Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
  - Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
  - Prepare to identify/develop and equip emergency shelters in campus facilities.
  - Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
  - Prepare to Close emergency valves to the sewer drains
  - Prepare to Check sump pumps to ensure they are in operation or ready for operation
  - Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
  - Prepare to provide shut down flammable liquid and flammable gas systems
  - Prepare to cover large stationary machines with water-displacing, rust-

## **James Madison University Flood Water Plan**

- preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency

## **James Madison University Flood Water Plan**

- Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- 
- The Emergency Coordinator responsibilities include:
    - The coordinator is responsible for the overall coordination of the University Emergency Response
    - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
    - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
    - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
    - Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
    - Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
    - Insures that appropriate notification is made to off campus staff when necessary
    - Performs other related duties as may be directed by virtue of the campus emergency.
    - In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
    - Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management

## **James Madison University Flood Water Plan**

- (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
  - Monitors campus emergency warning and evacuation systems
  - Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
  - Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
  - Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
  - Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
  - The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
  - Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
    - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
    - Mechanical Systems – will maintain:
      - Building sprinkler systems
      - Order a fire watch if fire alarms are disabled
    - Building Automation will cut off HVAC
  - Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in the Studio Center and 131 West Grace building dispatch will:**

- If flood water is found in the Studio Center or 131 West Grace street the dispatcher will once again contact appropriate building coordinators and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility

## **James Madison University Flood Water Plan**

- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Blacks Run for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks
  - Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged



## **James Madison University Flood Water Plan**

- Check and repair all fire protection alarm systems

### **In the Event of Flooding of Godwin Hall**

If flooding of Godwin Hall is eminent the JMU Chief of Police or his/her representative will work with the Godwin Hall building coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from Newman Lake, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround Godwin Hall the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential

## **James Madison University Flood Water Plan**

- The dispatcher will contact appropriate staff using the alarm contact list for Godwin Hall
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Godwin Hall the dispatcher will once again contact the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Godwin Hall and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Sibert adjacent to Godwin Hall, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of Godwin Hall and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency

## **James Madison University Flood Water Plan**

- The dispatcher will contact appropriate staff using the alarm contact list for Godwin Hall
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.
  - Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
  - Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
  - Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
  - Prepare to identify/develop and equip emergency shelters in campus facilities.
  - Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents

## **James Madison University Flood Water Plan**

- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.

## **James Madison University Flood Water Plan**

- Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
  - Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
  - Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
  - Insures that appropriate notification is made to off campus staff when necessary
  - Performs other related duties as may be directed by virtue of the campus emergency.

## **James Madison University Flood Water Plan**

- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in Godwin Hall dispatch will:**

- If flood water is found in Godwin Hall the dispatcher will the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building

## **James Madison University Flood Water Plan**

- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Godwin Hall and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks
  - Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits

## **James Madison University Flood Water Plan**

- Inspect sprinkler system piping for damage and repair as needed
- Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
- Check and repair all fire protection alarm systems

### **In the Event of Flooding of Plecker Athletic Performance Center**

If flooding of Plecker Athletic Performance Center is eminent the JMU Chief of Police or his/her representative will work with the Plecker Athletic Performance Center building coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.



## **James Madison University Flood Water Plan**

In the event of flash flooding or slow rising waters from Newman Lake, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround the Plecker Athletic Performance Center the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Plecker Athletic Performance Center
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Plecker Athletic Performance Center the dispatcher will once again contact the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Plecker Athletic Performance Center and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to the Plecker Athletic Performance Center patrol officers will routinely keep a check

## **James Madison University Flood Water Plan**

on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of Plecker Athletic Performance Center and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Plecker Athletic Performance Center
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.
  - Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
  - Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.

## **James Madison University Flood Water Plan**

- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:

## **James Madison University Flood Water Plan**

- Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
- Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
- Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
- Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
- Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
- Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators forliaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.

## **James Madison University Flood Water Plan**

- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:

## **James Madison University Flood Water Plan**

- Building sprinkler systems
- Order a fire watch if fire alarms are disabled
- Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in Plecker Athletic Performance Center dispatch will:**

- If flood water is found in Plecker Athletic Performance Center the dispatcher will the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Plecker Athletic Performance Center and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks

## **James Madison University Flood Water Plan**

- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

# James Madison University

## Flood Water Plan

### In the Event of Flooding of Champions Drive Parking Deck

If flooding of Champions Drive Parking Deck is eminent the JMU Chief of Police or his/her representative will work with the Champions Drive Parking Deck building coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from Newman Lake, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround the Champions Drive Parking Deck the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Champions Drive Parking Deck
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Champions Drive Parking Deck the dispatcher will once again contact the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Champions Drive Parking Deck and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)



## **James Madison University Flood Water Plan**

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to the Champions Drive Parking Deck, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of Champions Drive Parking Deck and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Champions Drive Parking Deck
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.

## **James Madison University Flood Water Plan**

- Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
- Prepare to obtain the assistance of utility companies as required for emergency operations.
- Prepare to furnish emergency power and lighting systems, as required.
- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:

## **James Madison University Flood Water Plan**

- Establishes liaison with the news media for dissemination of information as requested by President
- Establishes liaison with local radio and TV services for public announcements
- Arranges for photographic and audio/visual services
- Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
- Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support

## **James Madison University Flood Water Plan**

- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
  - Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
  - Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
  - Insures that appropriate notification is made to off campus staff when necessary
  - Performs other related duties as may be directed by virtue of the campus emergency.
  - In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepare and submit a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
  - Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
  - Notifies University's Director of Facilities Management and administrators of major emergencies
  - Monitors campus emergency warning and evacuation systems
  - Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
  - Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
  - Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed

## **James Madison University Flood Water Plan**

- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in Champions Drive Parking Deck dispatch will:**

- If flood water is found in Champions Drive Parking Deck the dispatcher will the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Champions Drive Parking Deck and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical

## James Madison University Flood Water Plan

- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks
  - Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

# James Madison University

## Flood Water Plan

### In the Event of Flooding of Sonner Hall

If flooding of Sonner Hall is eminent the JMU Chief of Police or his/her representative will work with the Bridgeforth Stadium building coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

In the event of flash flooding or slow rising waters from Newman Lake, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, threatening to flood Sonner Hall the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Bridgeforth Stadium
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Sonner Hall the dispatcher will once again contact the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Sonner Hall and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings will be tasked in their Flood Emergency Response Plans with monitoring conditions and taking appropriate action as necessary. These operations should be alerted as

## **James Madison University Flood Water Plan**

conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100 year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to Sonner Hall, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, flooding the ground floor of Bridgeforth Stadium and threatening flooding of the intersection, the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Sonner Hall
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.



## **James Madison University Flood Water Plan**

- Prepare to furnish emergency power and lighting systems, as required.
- Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
- Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.
- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services

## **James Madison University Flood Water Plan**

- Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
  - Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post

## **James Madison University Flood Water Plan**

- Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
- Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.
- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepare and submit a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan

## **James Madison University Flood Water Plan**

- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:
    - Building sprinkler systems
    - Order a fire watch if fire alarms are disabled
  - Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in Sonner Hall JMU-PD Dispatch will:**

- If flood water is found in Bridgeforth Stadium the dispatcher will the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Bridgeforth Stadium and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical

## **James Madison University Flood Water Plan**

- services on an item-by-item basis
- Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
- Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
- Check all tanks for leaks
- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems

### **In the Event of Flooding of Bridgeforth Stadium**

If flooding of Bridgeforth Stadium is eminent the JMU Chief of Police or his/her representative will work with the Bridgeforth Stadium building coordinator to determine the appropriate time for evacuation at which point JMU Space Management will be called to arrange the move and storage of all moveable property in the building.

## **James Madison University Flood Water Plan**

In the event of flash flooding or slow rising waters from Newman Lake, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the stream will spill over its banks, surround the Bridgeforth Stadium the following procedure will be implemented:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- The dispatcher will contact appropriate staff using the alarm contact list for Bridgeforth Stadium
- The dispatcher will contact Landscaping Services personnel
- Landscaping personnel will continue to monitor the situation to determine if sandbagging around the perimeter of the building but not blocking egress.
- If flood water is found in Bridgeforth Stadium the dispatcher will once again contact the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Bridgeforth Stadium and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

The building coordinators and supervisors of operations in these buildings are instructed in their Flood Emergency Response Plans to monitoring conditions and taking appropriate action as necessary. JMU-PD will alert these operations as conditions change, with predicted flood levels and current water levels and an approximate schedule for water level rise and fall. At the time a flood threat is heightened to FLOOD WARNING (at the 100-year flood threat) level individual building flood plans will be activated with responsibility for closing operations remaining with the campus Emergency Coordinator.

In the event of flash flooding or slow rising waters from Newman Lake adjacent to the Bridgeforth Stadium, patrol officers will routinely keep a check on the rising waters that pose a threat of interior flooding of the building. If it appears that the

## **James Madison University Flood Water Plan**

lake will spill over its banks, flooding the ground floor of Bridgeforth Stadium and threatening flooding of the intersection, implement the following procedures:

- The officer(s) on patrol will contact the dispatcher and advise them of the flood potential
- Dispatch will notify the JMU Director of Public Safety or his stand in who will act as the Emergency Coordinator throughout the emergency
- The dispatcher will contact appropriate staff using the alarm contact list for Bridgeforth Stadium
- The dispatcher will notify the Safety Engineer who will activate the Damage Assessment and Mitigation – Emergency Response Team: acting under the direction of the Safety Engineer, the DAM-ERT will verify the condition of university properties subject to damage in the potential emergency, prior to and during an emergency event.
- The dispatcher will contact Director of Facilities Management to initiate pre-flooding preparations and damage control measures including but not limited to
  - Sandbagging the perimeter of the building being careful to not block egress
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations ready to take immediate action:
  - Mechanical Systems Manager (8-3337) - water, gas, electric, elevators, fire alarm, building sprinkler systems
  - Building Automation Manager (83337) HVAC
  - Power Plant Manager (8-6905) steam-heat
  - Prepare to provide equipment and personnel to perform shutdown procedures, hazardous area control, barricades, damage assessment, debris clearance, emergency repairs and equipment protection.
  - Prepare to provide vehicles, equipment and operators for movement of personnel and supplies, assigns vehicles, as required, to the Emergency Resource Team for emergency use.
  - Prepare to obtain the assistance of utility companies as required for emergency operations.
  - Prepare to furnish emergency power and lighting systems, as required.
  - Prepare to survey habitable space and assist Director of Procurement Material Management Services (ERTP) with the relocation of essential services and functions.
  - Prepare to provide facilities for emergency generator fuel during actual emergency or disaster periods.

## **James Madison University Flood Water Plan**

- Prepare to setup an alternate Command Post in the Facilities Management Building and coordinate with the Director of Public Safety (ERTC).
- Prepare to identify/develop and equip emergency shelters in campus facilities.
- Prepare to raise and relocate highly valuable and easily moved equipment, contents and vital records. This may require acquiring or renting special equipment to relocate contents
- Prepare to Close emergency valves to the sewer drains
- Prepare to Check sump pumps to ensure they are in operation or ready for operation
- Prepare to prevent water from entering key areas by using floodgates, stop logs, water barrier tubes, etc. An alternative but less reliable solution is to use sandbags to keep water from entering
- Prepare to provide shut down flammable liquid and flammable gas systems
- Prepare to cover large stationary machines with water-displacing, rust-preventive compound
- Prepare to fill empty storage tanks to prevent them from floating
- Prepare to ensure backup power supplies (generators) are functional
- Prepare to set up emergency communication equipment
- Prepare to monitor access to property and outside utilities during flooding
- Prepare to keep fire protection equipment operational for as long as possible.
- At his discursion the Emergency Coordinator will notify the Director of Media Relations who will:
  - Establishes liaison with the news media for dissemination of information as requested by President
  - Establishes liaison with local radio and TV services for public announcements
  - Arranges for photographic and audio/visual services
  - Advises the President, or his designee, of all news concerning the extent of disaster affecting the campus
  - Prepares news releases (concerning the emergency) for approval and release to media.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:



## **James Madison University Flood Water Plan**

- Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
- Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
- Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus.
- Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency.
- Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support.
- Meet with contractors who can help clean up and assist in post-flood repairs.
- At his discursion the Emergency Coordinator will notify the Director of JMU Procurement and Materials Management who will who will:
  - Establishes liaison with vendors and developers in order equipment, supplies and materials needed during the actual emergency
  - Coordinate with all Emergency Response Team members in the securing of equipment, material and supplies.
  - Evaluate the need to maintain emergency food and water supplies in shelters and/or specific areas on campus
  - Develop means with the Assistant Director of Human Resources & Training to secure emergency/temporary/volunteer personnel during the emergency
  - Provides for storage of vital records at an alternate site; coordinates with building and area coordinators for liaison and necessary support
- The Emergency Coordinator responsibilities include:
  - The coordinator is responsible for the overall coordination of the University Emergency Response
  - Determines the type and magnitude of the emergency and establishes the appropriate emergency command post
  - Initiates immediate contact with the President, Executive Vice President, and General Administration (Academic and Administrative Councils); begins assessment of the University's condition
  - Notifies and utilizes police, parking, and, if necessary, student staff (Cadets and/or Monitors) to maintain safety and order.

## **James Madison University Flood Water Plan**

- Notifies the members of the Emergency Resource Team; advises them of the nature of the emergency.
- Notifies and conducts liaison activities with appropriate outside organizations of public safety such as fire, police, the emergency operations center (EOC), state emergency services, and transportation officials.
- Insures that appropriate notification is made to off campus staff when necessary
- Performs other related duties as may be directed by virtue of the campus emergency.
- In consultation with the Safety Engineer, Director of Facilities Management, Director of Employee Relations and Training, and Director of Health and Recreation prepares and submits a report to the President and Executive Vice President appraising them of the final outcome of the emergency.
- Assist in maintaining the command control office (Public Safety Office) in a state of constant readiness. Assist the Director of Facilities Management (ERTDC) with the alternate Command Post in the Facilities Management Building.
- Notifies University's Director of Facilities Management and administrators of major emergencies
- Monitors campus emergency warning and evacuation systems
- Takes immediate and appropriate action to protect life and property; to safeguard records as necessary
- Obtains assistance from the city, county and federal government for radiological monitoring and first aid as required
- Provides traffic control, access control, perimeter and internal security patrols and fire prevention services as needed
- Maintains liaison with the Director of Facilities Management and Director of Media Relations as necessary
- The dispatcher will contact the Director of Facilities Management to initiate the Flood Emergency Action Plan
- The dispatcher will contact Landscaping Services personnel who will continue to monitor the situation to determine the need for additional sandbagging around the perimeter of the building, but not blocking egress.
- Notifying Assistant Director John Ventura (8-6341) who will have the following operations take immediate action:
  - Mechanical Systems – will cut: water, gas, electric, elevators, fire alarm,
  - Mechanical Systems – will maintain:

## **James Madison University Flood Water Plan**

- Building sprinkler systems
- Order a fire watch if fire alarms are disabled
- Building Automation will cut off HVAC
- Power Plant will cut off “steam” and hot water flow

### **If floodwaters are found in Bridgeforth Stadium dispatch will:**

- If flood water is found in Bridgeforth Stadium the dispatcher will the building coordinator and so advise
- The dispatcher will alert Housekeeping staff of the flooding of the interior of the building
- Housekeeping staff will monitor the situation to determine the appropriate time to commence evacuation of the water from the building followed by cleanup and sanitizing of the facility
- To return to officer duties, as the waters rise officers and available cadets will guard against persons wading in the flood waters in and around Bridgeforth Stadium and the nearby intersection for several reasons:
  - Submerged objects that could cause trips, falls, and/or cutting of feet
  - To prevent people from being swept downstream in the swift running waters
  - To avoid electrical shock in the event flood waters reach energized electrical lines or switchgear (there are subterranean service cables and an electrical transclosure box in the immediate area)

### **When Floodwaters Recede:**

- Implement rapid restoration of operations to continue as many portions as possible:
- Prioritize cleanup actions
- Prioritize the rebuilding or replacement of vital pieces of equipment that are most critical
- Set up temporary or skeleton operation at remote locations
- Document procedures on how production will be made up at other facilities
- Minimize the fire hazard during and after the flood:
  - Ensure the integrity of the electrical system and then restore the electrical services on an item-by-item basis
  - Only perform hot work if necessary and in a safe manner using the approved *Hot Work Permit System*, and only after fire protection systems are restored and combustibles are removed from the hot work area
  - Check all flammable liquid storage and flammable gas piping systems for leaks before returning to operation
  - Check all tanks for leaks

## **James Madison University Flood Water Plan**

- Remove combustible debris as it
- Return fire protection systems into service promptly by taking the following actions:
  - Run or test fire pump, fire pump driver, and controller. Repair if flood damaged
  - Examine the fire pump water source (particularly for open bodies of water) to ensure debris will not enter the pump suction line and the sprinkler system
  - Check the yard main fire protection system and water tanks for washouts
  - Remove water and mud from fire protection valve pits
  - Inspect sprinkler system piping for damage and repair as needed
  - Test all sprinkler control valves to ensure they are in the full open position, operable, and undamaged
  - Check and repair all fire protection alarm systems