

# THE UNIVERSITY OF TOLEDO

SUBJECT: FLOOD EMERGENCY RESPONSE PLAN

Procedure No. EP-08-020

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## PROCEDURE STATEMENT

The University of Toledo campus houses a portion of the Ottawa River. As a result of the river's presence on campus and the potential for flooding, it is necessary to establish procedures for monitoring conditions, notification, and implementation of actions to minimize potential damages to property and inconveniences to students, faculty, and staff.

## PURPOSE OF PROCEDURE

The Flood Emergency Response Plan has been designed to establish appropriate procedures for responding to a flood emergency that affects University operations. This plan addresses flooding as a result of natural occurrences and building system failures.

## PROCEDURE

Departments located in the buildings and areas listed in subsection I of Policies and Procedures, below, must have plans in place for dealing with high water by:

- establishing a method of communicating potential flooding to 44.99+36. building occupants;
- moving items to be protected from ground floor levels to upper floors;
- establishing pre-determined locations to which items may be moved;
- moving equipment and vehicles from garages, parking lots, and the grounds, to higher ground; and
- taking whatever steps are necessary to protect items that cannot be relocated.

It will be the responsibility of each department to physically relocate their own equipment and supplies, as Facilities Maintenance personnel will have the primary responsibility of performing numerous functions that are essential in lessening the impact of flooding conditions on buildings, building mechanical systems, and utilities. All persons shall use extreme caution in flood water, e.g. be alert for all electrical connections when moving or removing devices or equipment.

### 1. Areas and Buildings Affected

The low-lying areas of the campus are in the flood plain and could be affected if the river goes over the banks. The flood plain includes the following areas and buildings as determined within the 2014 AIG flood survey:

- Carlson Library (CL)
- Wolfe Hall/Bowman-Oddy Labs
- Savage Arena (SC)
- Health Education Center
- Student Union
- Academic House (AC)

- Larimer Athletic Complex
- Rocket Track & Field
- Parks Tower
- East Ramp Parking Garage
- Health & Human Services (HH)

## 2. Monitoring the River

River elevation conditions shall be evaluated and for triggering various levels of readiness notifications to departments on campus that would be affected by flooding conditions. There are a variety of factors that determine the possibilities and extent of flooding, including:

- Amount of rain in a given period of time up-stream.
- The quantity and rate of increase of water levels in a given time period.
- Temperature and time of year.
- Percentage of watershed covered.
- Soil condition, type of cover, and slope, which determine the amount of runoff in a given rain.
- Presence of ice in the river.

The National Water Information System [http://waterdata.usgs.gov/nwis/uv?site\\_no=04177000](http://waterdata.usgs.gov/nwis/uv?site_no=04177000) shall be utilized to identify water levels during times of heavy rainfall.

## 3. Notification

Notification to departments located in affected areas may be in either of two categories:

### **A. Flood Watch**

Conditions are such that departments will be notified that flooding is possible and that they should review plans for relocating essential equipment and have personnel and equipment ready to implement relocation plans on short notice.

### **B. Flood Warning**

Available information indicates that the river will go over the levee and will affect the lower areas of the campus. Departments will be advised to implement their flood plans.

### **C. Process**

Notification to identified building managers and departments located in affected areas will be accomplished by telephone calls through the Emergency Notification System as follows:

Risk Management is responsible for monitoring river conditions and for implementing, in conjunction with

Facilities Management, "Flood Watch" and "Flood Warning" notifications. A listing of all building and department contacts that should receive "Flood Watch" and "Flood Warning" notifications shall be maintained by Facilities Management and provided to Safety and Risk Management. The Flood Plan and listing of buildings and departments shall be updated each Fall to recognize the changes that have been made in facility usage and assignments.

Additional information may be obtained by contacting Risk Management.

#### 4. Responsibilities

We have approximately 50 people that would be ready to sand bag, pump, etc., whatever the situation warrants. This includes off duty staff that would be requested to respond if deemed necessary.

Pumps in Lot 10 and monitored by Central Control. Central Control will contact the manager to advise them when a situation exists. An on-call list will be utilized to call staff in to work.

#### **Available Managers Include:**

Jason Toth	419-297-3338
Jim Graff	419-466-1682
Chris Levicki	419-779-5493
Dan Perry	419-350-6440
Paul Dowling	734-807-1667
Doug Collins	419-277-1808
Jeff Gajdostik	419-367-0186

In the event of an electrical flood the following would occur:

The University of Toledo has a series of high voltage switches running along the embankment of the Ottawa River. Each individual switch is part of a loop system that can be fed from 1 of 2 directions. These switches can be opened or closed, depending on which way UT wants current to flow, and feed power to our individual buildings.

In the event of the Ottawa River rising and beginning to flood, the University of Toledo would evaluate which switches are in imminent danger of becoming flooded and begin the process of deploying sand bags and de-energizing any switch by opening the switches before and after. Power would be directed away from the flood zone until a safe distance is established. Once flood waters have receded, power would be re-established to the affected areas only after proper testing of any electrical gear affected by the flood have been conducted and any necessary repairs made.

5. Resources

**Floor Equipment**

2 (two) 4" Gas Pumps	900gpm
3 (three) 3" Gas Pumps	400gpm
15 (fifteen) 42" Box Fans	
6 (six)	Dehumidifiers
12 (twelve)	Carpet Fans
1 (one)	80kw Generator
10 (ten)	Wet/Dry Vacuums

**Floor Clean Up Contractors**

Service Masters	419-841-5578
AAA Standard	419-535-0274
Cousino Restoration	419-874-9500

**Sand Bag Delivery**

Sandman	419-865-1666
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Effective Date: 2/12/2016

Review/Revision Date: 1/3/2019