

Report on Major Flood Damage on 19/20 Nov 09

1.0 OVERVIEW

On Thursday 19th November, after a prolonged period of rainfall, the River Lee burst its banks and flooded an extensive area of Cork City. The main impacts were felt in the western side of the city, from Washington Street to the Lee Fields. The event has been described as a 1:100 or 1:800 year flood event. The dam at Inniscarra (8 miles from UCC) regulates the flow of water in the river. The ESB are responsible for the operation of the dam and it appears that they were forced to increase the release rate through the dam on Thursday evening, which resulted in catastrophic flooding of the city. The high tide at 9pm passed without incident but was quickly followed by rising river levels which caused the river to burst its banks and flood a large part of the city. River levels exceeded the ground floor levels of the majority of buildings within the flood fringe with resultant significant flooding to 29 UCC buildings. 30 of UCC's 80 acres was submerged in flood water. 77,000m² (c. 30%) of our building stock was affected with 27,000m² (c.13%) directly damaged at basement and ground floor levels. Over 500 staff were impacted by the flood and c.2,000 students were forced to evacuate their student residences.

1. Victoria Lodge (UCC/CAUL/Students Union)



Extent of Flooding



Evacuation of students

Damage :

- Ground Floor common room, apartments, laundry etc flooded to c. 2ft.
- Undercroft car park flooded (no basement)
- 2,500m² directly affected

Status (23/11/09)

- A major initial effort revolving around the evacuation of all students and organising food, showers, etc and special buses to help get students home. Alternative accommodation was provided for overseas students etc
- A major cleanup operation has commenced to clear water and damaged floors from apartments. The Agresso team office floors have been stripped and cleaned. Significant damage to floor mounted PC's/documents
- Power is back on in the development
- It should be possible to re-occupy upper floors by 30 November, 2009. All furniture to reception/damaged apartments to be replaced

Current Status (26/11/09)

- The clean-up operation is nearing completion.
- The furniture on the ground floor has been assessed and requires replacement up to worktop level.
- All upper floors will re-open on 30/11/09 as planned.
- Agresso team are back with network connectivity. Reoccupy offices 7/12/09.

2. University Hall

Damage:

- Ground Floor apartments, offices, 3 no. commercial units etc. flooded to c. 2ft
- Basement fully flooded affecting storage areas car park (2 cars) and essential building services plant
- 1,300m² directly affected



Extent of Flooding



Entrance to Basement

Status (23/11/09)

- Clean up operation (floors stripped, cleaning, de-humidification) under way to ground floor apartments. Commercial units currently vacant
- All ground floor furniture will need replacement
- Basement pumped out

- Design engineers on site on Monday 23rd to assess work required to restore power supply
- Expect to have upper floors available for 30/11/09
- CAUL allowing students access to personal items

Current Status (26/11/09)

- Basement cleaned out
- Temporary power supply to be put in place by Friday 27/11/09
- Ground Floor apartment needs full refurbishment up to work top level, furniture ordered
- Upper floor will be available for 30/11/09 as planned

3. Western Gateway (IT) Building



Damage:

- Ground Floor (PC labs, teaching rooms, offices etc) flooded to c. 2-3 inches above floor level. Large areas of raised access floors flooded. The 300 seat auditorium flooded to near ceiling height
- Large basement plant room fully flooded. Transformers, main board, heat pump etc all fully submerged
- Pedestrian Bridge to Brookfield fully submerged, but no apparent structural damage evident
- 6,000m² directly affected

Status (23/11/09)

- 95% of carpet removed, rooms/floor voids cleaned
- Raised floor structure under review (retain hopefully)
- Auditorium pumped out, complete rebuild required
- Engineers to review existing transformers, main panels, heat pump, control panels, etc. Outcome critical to reopening date for building. Temporary generators/boilers under consideration

- Temporary alternative accommodation required for schools, research units
- Floor replacement to commence on 23/11/09
- Building closed until further notice. Aiming to re-open for teaching next week

Current Status (26/11/09)

- Engineers receiving scope of repair/replacement of main mechanical and electrical plant. Transformers etc. will need replacement. Work in plant room will continue for 3/4 months.
- A temporary power/heating arrangement will be finalised by 27/11/09
- Auditorium seating/carpets/structure removed. Will be out of action until early 2010.
- Further repairs to ground floor (partitions, cabling, etc.) to be planned over coming months.
- Building will reopen as planned on the 30/11/09.
- Teaching will recommence in centrally booked rooms with the exception of G.05 on 30/11/09.

4. Mardyke Arena/Outdoor Sports Complex



Entrance To Mardyke Arena



Playing field/pavilion

Damage:

- The Arena building, pitches, pavilions, etc. were completely flooded to c. 4ft. There is significant damage to the Mardyke Arena sports hall (floor lifted), the pool, fitness suite, reception area etc
- Track, all weather pitch and changing rooms damaged
- 6,000m² affected

Status (23/11/09)

- Insurers to visit site on 25/11/09
- Emergency meeting of Board organised

- **Significant and costly** recovery operation required
- Building closed for extended period

Current Status (26/11/09)

- Insurers have visited site to assess damage.
- Clean up operation has commenced (pool drained, main hall floor removed).
- Major refurbishment required to ground floor (pool, hall, fitness suite, etc.)
- Building will be closed until further notice.
- Inspection completed for track/all weather pitch. Technical report awaited for review with insurers.
- Pavilions. Clean up operation commenced. Damage to power supply panels (flooding etc.) being assessed.
- Department of Physical Education and Sport working with Clubs to organise alternative facilities.

5. Western Road Houses - 2-8 Bloomfield Tce, 1-5 Brighton Villas, 1-2 Lucan Place, Laurels, Roseleigh, Ferry Lodge



Brighton Villas



Laurels

Damage:

- All these houses (16 no.) were flooded to c. 3ft. Significant damage to fabric, furniture and departmental material. Glenlee and St. Kildas (staff accommodation) were unaffected.
- Area damaged 1,100m²

Status (23/11/09)

- All ground floor room carpets stripped, floors cleaned and rooms dehumidified.
- All low level power sockets replaced
- Upper floors can be reoccupied on 23/11/09
- Floors to be replaced over coming weeks

- Power supplies restored
- Boiler repairs underway

Current Status (26/11/09)

- Building open to allow access to upper floors and to allow staff recover departmental material.
- Carpet/furniture replacement will proceed over coming weeks on a phased basis
- Boiler to Laurels/Roseleigh require replacement. Temporary heating in place.

6. Castlewhite (Student Accommodation)



Castlewhite Apartments



Castlewhite Courtyard

Damage:

- Flooded to c.3 ft. All ground floor apartments affected. Significant damage to kitchen & bedroom furniture
- Reception office badly damaged
- 1,900m² damaged including 84 student bedrooms

Status (23/11/09)

- Floors stripped, cleaning, dehumidification underway
- Furniture to be replaced
- Ground Floor apartments (84 beds) out until new year
- Initial focus on warden's apartments etc
- Upper floors can be available for 30/11/09

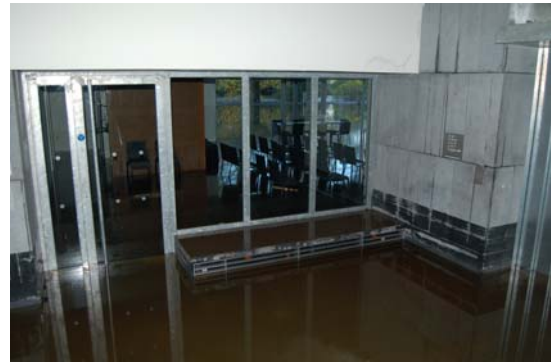
Current Status (26/11/09)

- Upper floors of building to re-open on 30/11/09 as planned.
- Refurbishment of ground floor apartments has commenced.
- Alternative accommodation for students organised by Campus Accommodation.

7. Glucksman Art Gallery



Gallery from west



Ground Floor

Damage:

- The Gallery building on the Lower Grounds was totally engulfed in the flood waters
- The ground floor (River Room and Restaurant) was flooded to about 3ft and the complete basement, which includes the Gallery Store (University Collection), kitchen, plant room were completely submerged
- Area damaged 600m²

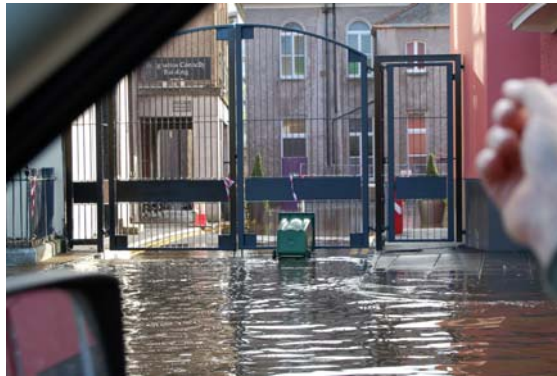
Status (23/11/09)

- Basement area now pumped out
- Team of art conservators gathered by Fiona Kearney from UCC and beyond. Art from store removed carefully and protected for further review
- Engineers assessing damage to major plant (power supply, heat pumps, lift etc.)
- Building will be closed for extended period.

Current Status (26/11/09)

- All artworks now removed from basement and conservation process has commenced (led by Fiona Kearney and staff)
- Clean-up operation to other areas commenced.
- Engineers are assessing the mechanical and electrical plant and devising a recovery/replacement plan. New Main Switch Board ordered.
- Temporary generator on site to provide some basic power/lighting etc. to facilitate recovery plan
- Building will remain closed until further notice

8. Connolly Building/Dyke Parade/Granary Theatre/Muskerry Villas



Connolly entrance

Damage:

- The Connolly Building complex, including the Granary Theatre, Dyke Parade & Muskerry Villas were flooded to c.3ft. There is significant damage to a large number of teaching rooms, offices, PC labs etc. The Granary Theatre floor is badly damaged. A small basement with boiler feeding Dyke Parade and archaeological stores was fully submerged.
- 1,000m² damaged

Status (23/11/09)

- Floors stripped, cleaning and dehumidification underway
- Basement area pumped out
- Heating not available as yet to part of complex
- Teaching rooms require replacement of AV consoles etc
- Offices in Dyke Parade unaffected
- Power supply restored
- Timber subfloors to theatre, link building etc. will require replacement
- Open access lab furniture, PCs etc will need replacement
- Temporary alternative office accommodation required for Geography, Planning, etc
- Building closed until further notice. Aim to get teaching rooms ready for 30/11/09

Current Status (26/11/09)

- Heating eastern block should be restored 29/11/09 following boiler refurbishment.
- All floors removed (incl. Granary Theatre floor). Reflooring will commence 27/11/09 as planned.
- Replacement audio visual facilities in teaching room underway.
- Teaching Room to be available for 30/11/09.

9. North Mall

Damage:

- The main flood damage affected the Enterprise Centre and Butler Buildings. Water level here reached 3 – 4 ft and all of the ground floor has been damaged. These areas include c.20 offices , teaching rooms, research rooms (incl research simulator), wet labs etc. Thankfully the Cooperage Building and Distillery House escaped any damage
- 2,400m² damaged

Status (23/11/09)

- Significant area of carpets stripped out, cleaning and dehumidification underway
- Power and heat restored
- Major refurbishment required including flooring, laboratory furniture, door replacement etc
- Building open (upper floors) 23 November, 2009
- Accommodation for displaced staff under discussion locally

Current Status (26/11/09)

- All floor stripped out and ready for carpet tiles commencing on 27/11/09 with initial focus on teaching rooms.
- Major furniture replacement programme required (phased).
- Glass houses inspection organised.
- Audio Visual equipment repairs proceeding to teaching rooms.
- Centrally booked rooms to be reopened 30/11/09 as planned.

10. Maltings Complex (and Tyndall)



View from Grenville Place (quay wall collapsed)



New Laboratory Building

Damage:

- The main flood damage here was experienced in the older parts of the Tyndall and Lee Mills House. A number of high value equipment items were damaged, the new laboratory building experienced some relatively minor influx of flood waters to the basement
- 1,500m² affected

Status (23/11/09)

- Significant clean up operation completed (Tyndall FM Team)
- Expensive research equipment damage to be assessed next week
- Building can open on 23/11/09
- Water off, temporary supply organised for toilets, etc.
- Restaurant closed pending water supply
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Current Status (26/11/09)

- Cleanup operation is now complete
- Assessment of major equipment items under review.
- Building open (since 23/11/09)
- Temporary water supply arrangement in place.

11. Other UCC Properties

The remainder of our properties were unaffected by the flood waters. Buildings on the upper levels of the campus were unaffected and the ERI building on Lee Road narrowly escaped the flood.

2.0 INSURANCES

Status (23/11/09)

Coyle Hamilton visited UCC with loss adjusters on Friday and viewed first hand damaged in selected areas. Agreement was reached on methodology for progressing recovery works. A team of surveyors are on site photographing assessing damage in each area. It is not possible at this stage to quantify the full extent of damage until further surveys/assessments are complete.

Current Status (26/11/09)

Coyle Hamilton and Loss Adjusters on site and have viewed all damaged areas. Methodology for completing repairs agreed. Discussions ongoing on merits of repair or replacement to major plant items. Further meeting 26/11/09.

3.0 ALTERNATIVE ACCOMMODATION

Status (23/11/09)

The office accommodation of up to 500 staff was affected by the flood. A list of alternative areas has been developed for review with the affected units (c. 20no). Local arrangements may be possible in some cases. Occupants of the Western Gateway Building may be able to reoccupy parts of properties previously vacated on a temporary basis. Temporary accommodation in Library Reading rooms has been established. CIT offered some office accommodation in Music School and a building on Model Farm Road was also kindly offered by person close to UCC.

Current Status (26/11/09)

Options for relocating affected staff discussed with 20 affected departments/units on 23/11/09. Local arrangements in place to the satisfaction of each unit. All assistance possible has been provided to units to minimise disruption to ongoing activities. Contingency arrangements in place to respond to any changing circumstances.

4.0 OUTLOOK

A significant recovery effort involving well over 200 people has been in place since Thursday night. The initial focus has been on emergency and safety issues involving staff/students and the initial clean up caused by the flood waters. The current focus is on achieving a return to full teaching on 30/11/09. This involves :

- Re-flooring/decoration etc focused on refurbishment of teaching rooms for commencement of lectures/labs by 30/11/09.
- Continued replacement of damaged furniture, computers, etc. phased.
- Recovery/replacement of plant located in previously submerged plant rooms (WGB/Glucksman/University Hall)
- Cleanup/recovery plan for Mardyke Arena

It is anticipated that the effects of the flood will extend for many months and full recovery will not be possible until well into 2010.

*Prepared by Buildings and Estates Office in conjunction with
Computer Centre
Audio Visual Services
Campus Accommodation
Mardyke Arena*