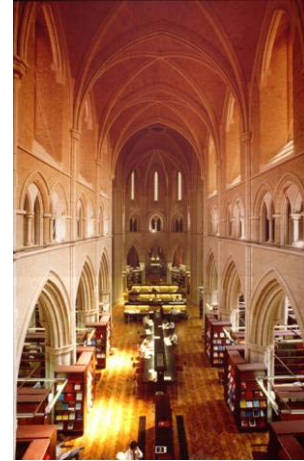
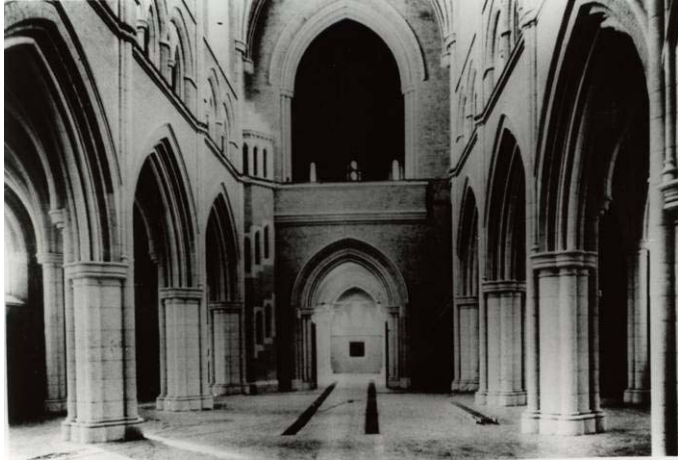


# Disaster recovery - at the sharp end

## Flooding and disaster planning at The Royal London Archives and Museum

Jonathan Evans, Archivist and Curator  
September 2006

# Background: St. Philip's Church



- The Royal London Hospital Museum opened to the public in 1989 and is located in a late 19<sup>th</sup> Century building , a former Church of England Church together with the medical library of Barts and The London School of Medicine and Dentistry.
- Designed as a place of worship, the building was built with minimal drainage
- Above left: Conversion of St. Philip's Church, Whitechapel, c. 1987
- Above right: Barts and The London School of Medicine and Dentistry Library in St. Philip's Church, 1990s

# Royal London Hospital Museum



- In 2001 Royal London Hospital Museum benefited from a Heritage Lottery Fund Grant and was refurbished, but remained located in the basement (former crypt) of St. Philip's Church.

# Barts and The London

- In 1994 Barts and The London NHS Trust was formed.
- Took over the management of the existing hospital archives and museum, uniting the services in the same directorate (Trust HQ) with similar line management, etc.
- Tenure of premises of RLH Museum remained with Medical College which became part of Queen Mary in 1995

# Royal London Hospital Archives

- **2004:** Royal London Hospital Archives transferred from premises at Whitechapel to purpose adapted premises at Prescott Street, Aldgate
- Includes archive strongroom, search room, and office
- Premises shared with Trust Records Centre
- Records Centre experienced a flood soon after opening



# Royal London Hospital Archives and Museum disaster plan: formulation

- Formulation began early 2006, based in part on existing disaster plan for SBH Archives and Museum.
- The disaster plan covers several areas in Barts and the London NHS Trust: The Royal London Hospital Museum in Whitechapel, Royal London Archive (strongroom, searchroom, and office) and the Trust Records Centre in Aldgate.
- Barts Archives and Museum retains its own disaster plan.

# Disaster plan development

- Plan in development when the museum was flooded on 13 June 2006
- Subsequently reviewed: details were amended after learning from experience.
- Long document (approximately 30 pages)
- Covers preventative measures, action to take during a disaster, salvage and monitoring after disaster.

## *Includes:*

- list of equipment (disaster kit), vital records (including pictures)
- how to remove & sort archives / pictures / museum objects

# Plan content

The plan also includes:

- monitoring following disaster (e.g. temporary closure of services)
- IT disasters (list of computer equipment & contacts)
- security (e.g. how to disable alarms, names of individuals who have access to secure areas)
- temporary storage areas
- information re drying damage material
- other sites containing Trust historical assets
- copy of the damage sheet.



# Action to take in a disaster

In a disaster, the following are very useful:

- list of contacts, e.g. archivists (including home details)
- security, building managers, estates
- details for services like the fire brigade pumping-out service, Thames Water, alarm company
- insurance company, conservators, and specialist drying restoration service (Harwell, with whom the Trust has a contract).

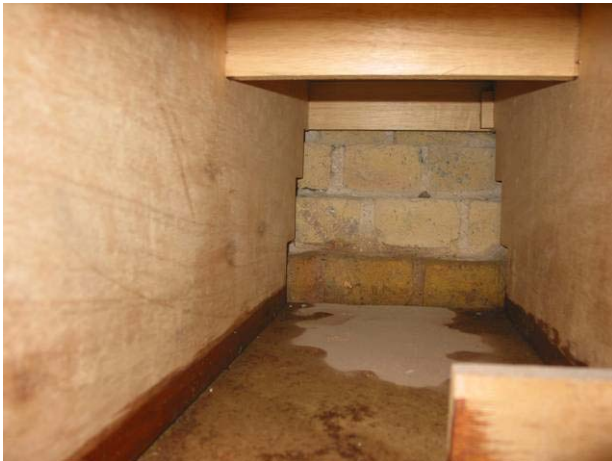
# The flood

- Flood resulted from blockage in the drainage system (caused by piece of masonry lodged in the sewer outflow pipe)
- Exacerbated by installation of new toilets (disabled and non disabled in building in early 2006.
- At 16.00 on that day 1.5” of rain fell in 20 minutes at Whitechapel
- Museum being invigilated by volunteer who contacted assistant archivist and records manager working at Prescott Street. Access to the list of contacts in disaster plan is particularly important if there is a volunteer supervising the area when disaster strikes.

# Issues raised by the flood

- Archivist was on-site at Whitechapel, but was in consultation with archaeologists working on building site and could not be contacted for 30 minutes.
- Medical School/ Queen Mary Estates Department gave assistance – medical library also flooded.
- Existing emergency procedures suggested contacting NHS Trust Estates – discussion over who was responsible for clean up.
- Floodwater contaminated with sewage – air conditioning helped clear the air.
- Laminate floor ‘floated’ on floodwater and retained it underneath. Museum designers/ contractors installed laminate flooring in a basement.

# Blocked drains and museum on 14.6.06



# Flood and cleanup 1

- Due to large number of call outs on 13<sup>th</sup> June, Thames Water contractor only arrived next day – until then College Estates installed a pump to reduce water level
- Industrial strength Aquavac was essential to clean up
- 4 dehumidifiers rented next day – retained for duration of museum closure and thermohydrographs installed and monitored very regularly
- Until source of blockage was identified, constant vigilance was vital to minimise risk of further flooding.
- When lifted laminate floor a potential health hazard

# Clean up photos 14/15.06.06



# Flood and cleanup 2

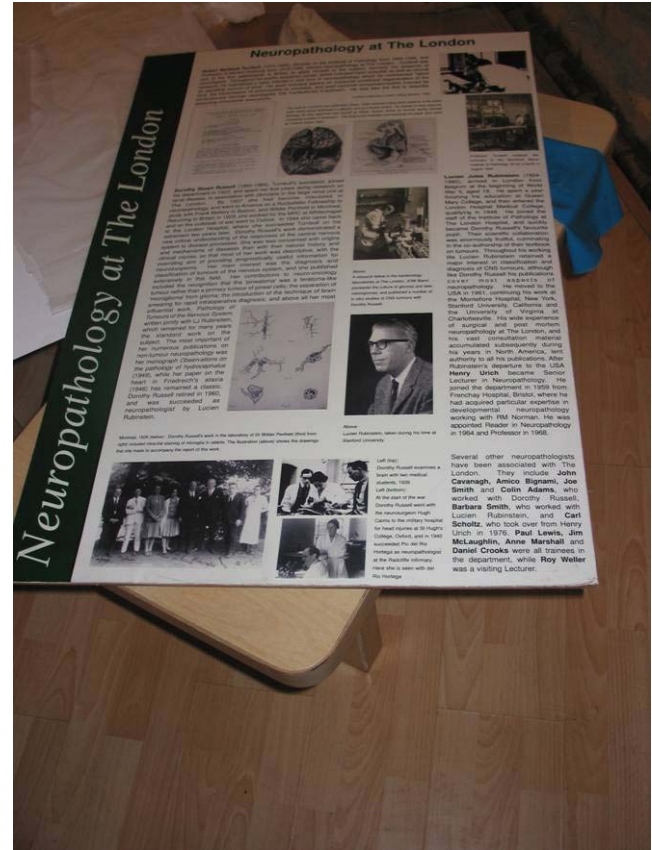
- Archivist and a technical manager worked with estates staff to remove flood water a.s.a.p.
- 100 aquavac buckets removed from the museum on the day of the flood
- Archivists and records managers packed up office equipment, undamaged publications stock, etc. next day
- New floor quoted for, commissioned and installed within 10 days of the flood.
- Cleaners used antibacterial spray on brickwork etc.
- Additional vents installed in showcases to assist drying process.

# Lessons of the flood: equipment, practice

- Maintaining emergency supplies (disaster kit), eg. protective gear etc. essential
- Investigate keeping aquavac on-site
- Be vigilant of misuse of WCs (e.g. flushing of towels). Report bad drain smells, etc.
- Maintain close liaison with transport and professional colleagues
- Flood alarm would have been very important if the flood had happened when museum was closed. The disability lift alarm in the library was found to have triggered when it's base became flooded: this cannot be guaranteed to if flooding reoccurs
- Keep everything off the floor.



# Dehumidification and basic remedial action



# Lessons of the flood: insurance, conservation

- Insure for all risks and changes of location – two pictures which had frames damaged were wrapped but were resting on floor as they had just been accessioned and were awaiting transfer to picture racking
- Have a digital camera ready so you can take pictures of damage to premises and individual items a.s.a.p.
- Get your conservators to look at damage a.s.a.p.
- 4 portable dehumidifiers were hired: essential in avoiding damage to museum exhibits / fabric: know how to access these

# Damage to two frames / mounts



# Lessons of the flood: communication

- Mobile phones can be very helpful in a crisis
- Draft disaster policy helped establish protocols: e.g. assistant archivist on leave was contacted.
- Archivists at Barts took lead in contacting other museums etc.
- Flood affect neighbours too – Library has had to replace base of mobile shelving. Flood has led to closer cooperation with Library and Medical School colleagues
- Communication with Trust through Trust bulletins etc.

# Disaster plan : implementation

Implementation of the disaster plan involves:

- Purchasing equipment
- Labelling vital records
- Putting the contacts list into the stores (laminates where possible, in case of flood)
- Informing and distributing the disaster plan to relevant members of staff (whilst being aware of Data Protection, re home contact details).

# Flood follow up

- Camera investigation of drain system revealed source of the problem.
- Floor replaced – laminate was unsuitable – new floor is glued to the base and is suitable for use in bathrooms and kitchens
- College insurance covered floor. NHS insurance did not cover loss of publications stock, damaged display boards or Flesh and Blood posters.
- Museum reopened after 2 week closure.

# Museum reopens 29.06.06



# Disaster plan adapted

- Remedial action taken, e.g. purchase of a mobile phone because the archivist, though on-site and therefore difficult to contact.
- After the disaster, it is important to record damage and action taken (partly for insurance purposes). Photographs should be taken and shown to relevant people (then stored on an office shared drive if digital).
- Details of damaged items should be recorded on the damage sheet, such as reference, location, description, damage, action, box number (that the item was packed into), and comments.



# Aftermath

- Temporary museum closure allowed time to make minor adjustments / improvements to museum displays
- Humidity levels in museum cases average 60% in the 5 month period following the flood
- Damaged paintings currently undergoing conservation: this work has been covered by insurance. Damage to temporary display boards / posters was not covered by insurance.
- College Estates continue to check drains regularly
- Museum visitor figure have returned to seasonal norm, but some Trust and College staff think museum is still closed