

Flooding and Historic Buildings

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Flood risk

- Currently around 560,000 properties are located in areas where there is a high risk of flooding
- Many of these buildings were built before 1919 and are likely to be of historic interest
- The number of properties at high risk of flooding could increase by over 60% to 900,000 by 2035

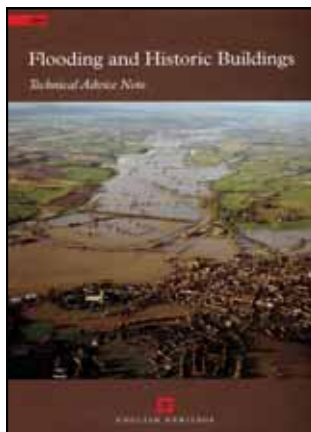


2007 floods



Positive outcomes

- Pitt Review
- A more integrated approach to flood risk management
- EA improved flood risk mapping and forecasting
- Local resilience forums
- Flood and Water Bill



Flooding and Historic Buildings Technical Advice Note guidance

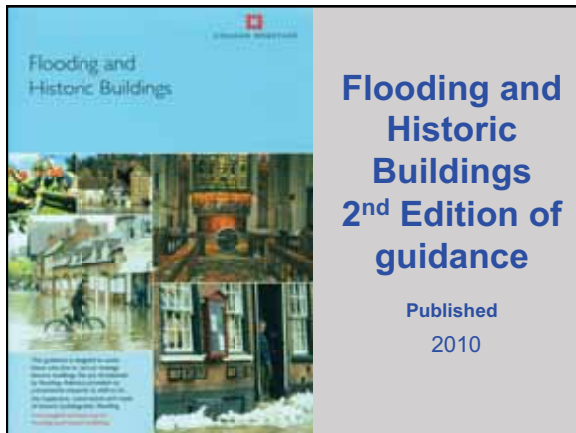
First published 2004



SPAB Technical Course

Tewkesbury

June 2008





Resilience: Permanent Property Level protection



Recovery: dealing with flooded historic buildings



Recovery: Post flood-assessment



Damage during recovery

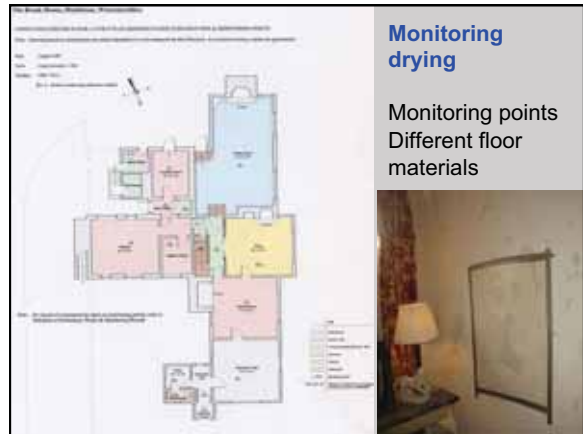
Problem areas

- Inappropriate recovery work-unnecessary removal of fittings and finishes that had been subject to flooding but could still be retained
- No involvement of Conservation Officers in work proposals
- Rapid drying techniques
- Lack of involvement of specialists- architects and surveyors experienced with historic buildings
- Works carried out to listed buildings without consent
- Loss adjusters making decisions on repairs without sufficient knowledge of traditional construction
- Contractors appointed by insurance companies that have no experience of working on historic buildings
- Inappropriate reinstatement of incompatible materials

Plan for drying out

Drying time and regime depends upon:

- Time of year
- Building fabric
- Porosity and permeability of the materials
- Flood duration
- Type of flooring
- Water table
- Ambient relative humidity



THE BROOK HOUSE, HEMBLETON
Schedule of preliminary works & monitoring record (at 20th November 2021)

Notes:
 1. Make a drawing to a 1:20 scale of all monitoring points.
 2. Monitor readings taken with Protonator 500 generally at 9am on days for which a report is required. These readings are relative and are intended for comparison purposes. It is not possible to make any direct comparison between readings taken at different points.
 3. Unusual readings, for example (but not limited to) high or low readings, should be noted on the report and the cause of the reading should be investigated and reported to the relevant authority.

Item	Monitoring point	Site ref.	10/11/2021	11/11/2021	12/11/2021	13/11/2021	14/11/2021	15/11/2021	16/11/2021	17/11/2021	18/11/2021	19/11/2021	20/11/2021
A. Basement perimeter wall/external	P101	P101	100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100
B. 1st floor ceiling	P102	P102	100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100
C. 2nd floor ceiling	P103	P103	100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100	100	100	100



Repairs



Conclusions

- Better awareness amongst owners
- Better training for recovery contractors of the special requirements posed by historic buildings
- More involvement of specialists architects/surveyors/conservation officers
- Better communication
- Better understanding from insurers/loss adjusters that specialist contractors might be needed
- One size does not fit all
- Realistic contract timescales
- More use of flood protection measures
- More research into drying techniques