

Dealing with flood damage

The information sheet provides advice on how to effectively plan for and respond to the impact of flooding on heritage buildings and structures.

Different Situations

Each situation will be different and these are some of the factors you may need to consider:

- Extent of flooding – depths of water and length of time under water.
- Flow of Flood Waters – faster flowing river will result in different problems such as undermining of foundations and mortar erosion.
- Geographic Context – soil type and site drainage may affect the drying out period as well as potential damage to buildings. For example, an area with heavy clay soils will drain slower and the resulting heaving and shrinking of soil may cause movement and cracking in masonry walls.

While floodwaters are still evident

- Assist water to drain away from buildings by improving site drainage around the immediate vicinity. Do not allow any water to remain up against walls such as in gullies or garden beds. If water is draining towards the buildings, take action to divert the flow away.
- Remember, it is important to be safe at all times. Be sure to listen to the advice given by emergency services or officers like your council building surveyor about whether your property is safe to enter or reoccupy.

Assess the Situation

- When floodwaters subside, undertake a thorough assessment of the situation. Check the structural integrity of buildings, including foundations and mortar erosion.
- Prop any damaged walls if the walls are likely to collapse or bow.
- Take photographs and record the damage for insurance purposes. Contact your insurance broker.

Steps to Take

- Open the buildings up – open doors and windows to assist in aerating and cross flow ventilation.
- Sweep out mud, river sand and any other debris.
- Remove sodden floor coverings and any fixed floor finishes. Remove anything on floor surface that is likely to rot or rust.

- Check, repair and open up if necessary, sub-floor air ventilation. It is essential to achieve good air flow beneath floor boards to facilitate the drying out and to prevent the boards from buckling due to condensation build up on the underneath face.
- Once the situation has been assessed and buildings have been stabilized, conservation can proceed at a more considered timeframe.

Repairs

- If your heritage property has been the subject of either minor damage or major structural issues, replacement in compatible (like-for-like) materials is generally preferred. In some cases, repairs may be undertaken using modern materials in a matching design to the original.
- If repairing mortar, try to achieve the same patina and character of old mortars by utilizing local river sands in mortar mix, with low ratios of cement. Further information on mortar and other repairs is available from the Office of Heritage.
- Like-for-like minor repairs will not generally require planning approval, though it is advisable to discuss your plans with the local planning officer first. Structural repairs or major works will usually require approval.
- If there is a reasonable opportunity for repair, heritage places should be retained. Approval for demolition may be given to buildings that are structurally unsound or damaged beyond repair. Works to clear the site and demolish remaining structures will require approval from the local government.

Planning for Future Flooding Events

Prevention and preparation are very important so consider preparing a Flood Management Plan, which includes:

- Identifying buildings under threat by differing severity of floods.
- Prioritise measures to take, for example, remove precious items to high ground, move furniture and furnishings under threat, roll up carpets and lino floor coverings, install and/or check water diversion measures such as levees and other site drainage.
- Given that many floods are seasonal and have lead times, a warning phase is often given. During this time, the measures described above can be actioned.
- Review your insurance policy. For more information on flood insurance, visit the Insurance Council of Australia's website:
www.insurancecouncil.com.au

Information source:

Inquiry into Natural Disaster Relief Arrangements in WA – Joint response from the Art Gallery of WA, The Library & Information Service of WA and the WA Museum, 1999.