

# Be prepared: Emergency planning toolkit for museums

December 2008



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## Foreword

A few years ago NMAS and the Sainsbury Centre for Visual Arts were tackling their emergency plans. We were struck by the complexity of the process and resolved to try to help colleagues in smaller institutions by producing a version tailored to their needs. The outcome is this document, which has been piloted through workshops around the East of England.

An emergency in a museum includes any incident that threatens the survival of the collection. Episodes of water penetration, mould and pest infestation do seem to be on the increase and affect museums of all sizes. Relatively minor incidents can result in a lot of damage. We hope you never have to face an emergency of any kind, but if it does happen, having prepared a plan with the aid of this document will help you minimise the damage.

Help may still be available to you through Renaissance in tackling the emergency planning process. Please don't hesitate to contact us if you have any questions or comments. We very much hope that, also through Renaissance, practical support in responding to an emergency will soon become available in our region.

**Cathy Proudlove**  
**Head of Conservation**  
**Norfolk Museums & Archaeology Service**

**December 2008**

## Introduction

Norfolk Museums and Archaeology Service has produced this emergency plan template to help make writing an emergency plan easier.

The template has been designed to be easy to use by simply inserting your own relevant information where prompted. As you are working through the template please add any further information you would find useful, and remove anything that does not apply to your institution. There are lists of information that can be cut and pasted to make each section specific to your institution. There are also guidance notes on how to create some sections.

The template has been designed so that a plan is produced for fire, flood and leak, for each room or area, both display and storage, on the site. The intention is to only have relevant and easy to find information to read if faced with an emergency. For example if you discover a flood in store 3, then all the information you need will be in that section, and you don't need to waste time looking through non-relevant information or worse, in a panic use the wrong information. The sections for pests, theft and vandalism, and security threats are single sections because the information will usually be the same whichever area the incident occurs in.

Any existing risk assessments, evacuation procedures, building maintenance programmes etc. can be included.

Appendix 1 guides you through the use of the template and we recommend that you read this first. As you work on your plan always remember that it needs to be useful for your specific institution.

If you have any queries or comments on this Emergency planning toolkit, or would like to know more about emergency planning and conservation training in the East of England, please contact:

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**Regional Conservation Officer**  
**Norfolk Museums & Archaeology Service**  
**T: 01603 493637 E: [sarah.norcross-robinson@norfolk.gov.uk](mailto:sarah.norcross-robinson@norfolk.gov.uk)**

# 1. Institutional information

**Name of institution** *(Insert name of your museum here)*

**Date of completion  
(emergency plan)** *(Insert date here)*

**Date of next update of plan** 1 year from above date

## **List of locations where this plan is on file (on and off premises)**

*(Insert name of plan holder and location here)* (on premises)

*(Insert name of plan holder and location here)* (off premises)

*(Continue to add further details if appropriate)*

## **Staff members with a copy of this emergency plan**

*(Insert name of plan holder and job title here)*

*(Insert name of plan holder and job title here)*

*(Continue to add further details if appropriate)*

## **Staff members familiar with the contents of the emergency plan**

*(Insert name and job title here)*

*(Insert name and job title here)*

*(Continue to add further details if appropriate)*

**Location of salvage areas**

*(Insert details here)*:on site

*(Insert details here)*:off site

*(Add further details such as access arrangements if appropriate)*

## 2. Essential services at *(insert name of your museum here)*

### 2.1 Contact details

#### Electricity

- Supplier:
- Day tel:
- Out of hours tel:
- Customer Ref:

#### Gas

- Supplier
- Day tel:
- Out of hours tel:
- Customer Ref:

If you smell gas:

Call **Transco** (24 hour gas emergency service): 0800 111 999

Undertake the following procedures:

- **Don't** smoke or strike matches
- **Don't** turn electrical switches on or off
- **Do** put out naked flames
- **Do** open windows and doors
- **Do** keep people away from the affected area
- **Do** turn the meter off at the control valve

#### Water

- Supplier:
- Day tel:
- Out of hours tel:
- Customer Ref:

#### Insurance

- Insurance contact name:
- Day Tel:
- Mobile:
- Policy No:



## Police

Local station:

- Day tel:
- Out of hours tel:

**In an emergency dial 999**

## Fire Station

Local station:

- Day tel:
- Out of hours tel:

**In an emergency dial 999**

## 2.2 Service control points located in your museum:

*(The following is only a guide and can be altered as appropriate)*

### Stop cocks (water)

Location: *(insert details here)*

### Electricity mains switch

Location: *(insert details here)*

### Fire alarm panel

Location: *(insert details here)*

### Security alarm panel

Location: *(insert details here)*

### Manhole

Location: *(insert details here)*

### Fusebox / Circuit stop

Location: *(insert details here)*

## 2.3 Site plan

*Insert floor plan of the museum (all public and non-public areas) here. Mark the service control points. Include the location of all break glass fire points, fire extinguishers and fire blankets. Colour code the information about the fire extinguishers to show what type of extinguisher it is (water, carbon dioxide, etc). Several additional copies of this plan can be produced, laminated and kept in the emergency plan. In the event of an emergency, the Fire Service will be able to identify where fire-fighting equipment is situated. You could also include any risk information that the fire brigade would need to know.*

### 3. Emergency procedures at *(insert name of your museum here)*

#### 3.1 Fire alarm and evacuation procedures

##### Fire alarm details

###### For this building:

- When the fire alarm sounds, it is in the form of *(insert details specific to your fire alarm here, e.g. a continuous ringing bell)*
- The fire alarm is tested routinely every *(insert name of day here)* at *(insert time here)*

##### Basic procedures

###### On discovering a fire:

- Raise the alarm by using the Break Glass call points situated around the building. This will inform other people in the building. *(Delete the following in accordance to the situation in your institution:*
- Do not attempt to use fire-fighting equipment (e.g. extinguishers), unless you have been **specifically trained** to do so and you feel confident that you can do so. Do not take personal risks.
- Do not attempt to rescue any objects whilst leaving the building, either from display or storage areas. Salvage should only commence once the Fire Brigade have the situation under control.
- Make your way to a Fire Exit, closing doors behind you if possible. Go to the designated assembly point outside *(insert the name of the fire assembly point here)*.

###### On hearing the fire alarm:

- Make your way to a Fire Exit, closing doors behind you if possible. Go to the designated assembly point outside *(insert the name of the fire assembly point here)*.
- Do not attempt to rescue any objects whilst leaving the building, either from display or storage areas. Salvage should only commence once the person in charge has undertaken a risk assessment.

##### Evacuation procedures

*(Insert your evacuation procedure information here).*

### 3.2 Key control procedures

The following table shows the sets of keys within the museum (*insert more rows if needed*)

<b>Room name / no.</b>
------------------------

**Key name / no.:** *(Insert details here)*

**Designated key holder's name:** *(Insert details here)*

**Key holder's home tel:** *(Insert details here)*

**Work tel:** *(Insert details here)*

**Mobile:** *(Insert details here)*

**Alternative key holder's name:** *(Insert details here)*

**Key holder's home tel:** *(Insert details here)*

**Work tel:** *(Insert details here)*

**Mobile:** *(Insert details here)*

<b>Room name / no.</b>
------------------------

*(Insert as many sections as required)*

<b>Vehicle name / no.</b>
---------------------------

*(Think about any local authority, other museum, friends or neighbour's vehicles that you may be able to arrange to use in the event of an emergency)*

**Key name / no.:** *(Insert details here)*

**Designated key holder's name:** *(Insert details here)*

*(Continue to insert the same information as above)*

## 4. Health & safety procedure during an emergency at *(insert name of your museum here)*

The person in charge must undertake dynamic risk assessments as required.

### 4.1 First aid

Staff members who are currently trained in first aid:

*(Insert name here)*

**Job title:** *(Insert details here)*

**Museum department / section:** *(Insert details here)*

**Work tel:** *(Insert details here)*

**Mobile tel:** *(Insert details here)*

**First aider's home tel:** *(Insert details here)*

**Level of first aid training:** *(Insert details here)*

**Last training received:** *(Insert details here)*

**Training renewal date due:** *(Insert details here)*

*(Insert as many sections as appropriate)*

### 4.2 First aid kits

First aid kits are situated in the following areas of the museum:

- *(insert room name and number here)*
- *(Insert as many sections as appropriate)*

**In the case of an emergency, or as advised by a first aider  
contact the emergency services: dial 999**

### 4.3 Health and Safety during Salvage

**Electricity**

If you need to switch off your electricity supply and there is water present, get a qualified person to do it. **Do not** touch sources of electricity when standing in water. Backup lighting may need to be in place before salvage starts. The person in charge **must assess** the situation before you start salvage work

## Flood water

Flood water can contain sewage, chemicals and animal waste:

- Wear waterproof outerwear, including gloves and wellington boots.
- A face mask and goggles are advised.
- If mould is present then the face mask must be of a grade that filters mould spores.
- Do not let flood water come into contact with open wounds or grazes: if it does, obtain an anti-tetanus injection as soon as possible if you don't have an up to date one, or are unsure.
- Always scrub and disinfect hands before eating.
- Do not work in deep or fast flowing water.
- Be aware of concealed hazards such as broken glass or slippery silt underfoot.
- Be aware of the effects of cold water over time e.g. reduced dexterity and mobility; regular breaks may be needed.

## Fire

Fire can create dangerous environments by releasing hazardous chemicals. If you have identified these in advance, you may be able to salvage with the correct procedure and equipment.

## 5. Emergency response team

### 5.1 Contact details

#### Overall Co-ordinator

**Name:** *(Insert name here)*

**Work tel:** *(Insert number here)*

**Home tel:** *(Insert number here)*

**Mobile:** *(Insert number here)*

#### **Specific Responsibility in Case of Emergency:**

- Contacts insurers
- Stays in one place and is available to make decisions
- Undertakes continuous risk assessments
- Acts as, or appoints media contact
- Supports team leaders
- Records events or delegates

#### Deputy

**Name:** *(Insert name here)*

**Work tel:** *(Insert number here)*

**Home tel:** *(Insert number here)*

**Mobile:** *(Insert number here)*

#### Emergency Services Liaison

**Name:** *(Insert name here)*

**Work tel:** *(Insert number here)*

**Home tel:** *(Insert number here)*

**Mobile:** *(Insert number here)*

#### **Specific Responsibility in Case of Emergency:**

- Liaison with emergency services, Co-ordinator and Salvage Co-ordinator
- Responsible for security of site
- Responsible for control of access to the site

**Deputy**

**Name:**           *(Insert name here)*

**Work tel:**       *(Insert number here)*

**Home tel:**      *(Insert number here)*

**Mobile:**        *(Insert number here)*

*(Continue to add details of emergency response team members here.)*



## 6. Volunteer Response Team

### 6.1 Contact Details

#### Volunteer 1.

**Name:** *(Insert name here)*

**Work tel:** *(Insert number here)*

**Home tel:** *(Insert number here)*

**Mobile:** *(Insert number here)*

Any specialist knowledge/ skills/ contacts that may be used in the case of an emergency?

#### Volunteer 2.

**Name:** *(Insert name here)*

**Work tel:** *(Insert number here)*

**Home tel:** *(Insert number here)*

**Mobile:** *(Insert number here)*

Any specialist knowledge/ skills/ contacts that may be used in the case of an emergency?

*(Continue to add details of volunteer emergency response team members here)*

## 7. *(Insert name of room or area here)* Emergency plan

### 7.1 Fire

#### Basic procedures

##### On discovering a fire:

- Raise the alarm by using the Break Glass call points situated around the building. This will inform other people in the building.
- Do not attempt to use fire-fighting equipment (e.g. extinguishers), unless you have been **specifically trained** to do so and you feel confident that you can do so. Do not take personal risks.
- Make your way to a Fire Exit, closing doors behind you if possible. Go to the designated assembly point (*insert the name of the fire assembly point here*).
- **Do not attempt to rescue any objects whilst leaving the building**, either from display or storage areas. Salvage should only commence once instructed.
- The Fire Brigade will investigate the situation and inform the **Emergency Services Liaison** when the building is safe to enter, and by whom.

##### On hearing the fire alarm:

- Make your way to a Fire Exit, closing doors behind you if possible. Go to the designated assembly point outside (*insert the name of the fire assembly point here*).
- **Do not attempt to rescue any objects whilst leaving the building**, either from display or storage areas. Salvage should only commence once instructed.
- The Fire Brigade will investigate the situation and inform the **Emergency Services Liaison** when the building is safe to enter, and by whom.

#### Risks to objects

##### In the event of a fire, objects are at risk from the following:

- Being completely destroyed
- Being partially burnt
- Suffering from soot deposits
- Being water damaged from the fire fighting

##### Water damage resulting from fire fighting:

- Assess the objects that are most at risk / badly damaged. Take into consideration any that are on the **Priority for salvage floor plan**

**Where are you going to move objects to? (i.e. treatment areas to assess their condition):**

**Either** of the following:

- *(insert name of room or area)* (onto floor or table, both to be padded with blankets or foam, then covered in tissue if objects are dry OR blankets or foam and polythene if objects are damp/wet).
- *(insert name of alternative room or area)* (onto floor or table, both to be padded with blankets or foam, then covered in tissue if objects are dry OR blankets or foam and polythene if objects are damp/wet).

*(Think about any local authority, other museum, friends or neighbour's buildings that you may be able to arrange to use in the event of a major emergency where you need to move collections off site)*

**IMPORTANT:** dry objects must be kept away from damp/wet objects. This needs to be assessed as objects are taken to treatment areas. **Ideally** there should be two areas: dry treatment area **and** damp/wet treatment area.

- Prepare treatment areas **before** objects are moved.

**What do you need to move the objects?:**

- **Security screw drivers/ display case keys.** Cases should remain closed until you are ready to remove the objects.
- **Latex/ nitrile gloves** should be worn at all times when handling objects.
- **Scalpel/small scissors** (to remove objects that are tied onto mounts). Do all objects need to be removed from mounts or can they be moved as they are?
- **Trolleys** for moving boxes/crates.
- **Storage boxes/ crates for moving smaller objects.** If there are not enough, objects will have to be unpacked at the treatment area and the boxes re-used.

*(Adapt this section for the specific room or area)*

**IMPORTANT:** Wet/ damp organic materials (e.g. wood, leather, paper, textile) are at risk from mould growth. Objects should be air-dried within 48 hours to prevent mould growth. If there is a large volume of materials that cannot be dried within this time, undertake freezing (not suitable for all materials). **Contact a conservator (as recommended on your contacts list) who will advise on this.**

Follow the salvage notes for materials in this emergency pack, to see how materials should be treated after an emergency. Some materials require slow drying, as quick drying could cause serious damage.

### Smoke damage:

- Ensure that a Conservator removes any soot as soon as possible as it is acidic.
- **loose soot:** remove carefully with a conservation vacuum (**do not** use a normal domestic vacuum cleaner), used at a lower suction power (fitted with gauze on the nozzle).
- **ingrained soot:** attempt to use a soot sponge (under the supervision of a conservator).
- **If the object is wet:** rinse with clear water.
- **If objects are dry:** send to the dry object treatment area. If damp / wet, send to the relevant treatment area.
- A conservator will advise on further treatments.

### Documentation during salvage:

- Keeping track of objects as they move is very important.
- Use the **Recovery Sheet** to record basic information about each object.
- Labelling objects will help identify them.
- Digital photos can be taken to aid identification.
- Keep any detached labels with the objects (if possible). Paper labels can be tied to objects whilst they are in the treatment areas.

**SEE NEXT SECTION FOR: SALVAGE NOTES (air-drying and dehumidifiers)**



## Salvage notes

### Air-drying:

- Can be undertaken with objects laid out over an area.
- **Bread crates** (stackable) can be used to lay objects in, as they allow air to circulate.
- A **wind-tunnel** can be created to aid drying **but** is not for use with objects that require slow air-drying. For example, polythene sheets can be draped over tables and the objects laid out beneath the table. A fan can be placed underneath the table at one end **but** the air must not directly blow onto any objects. Objects that require quicker drying can be placed nearer the fan.

### Dehumidifiers:

- Can be used in rooms to help dry out rooms that have been damaged by flooding (or are water damaged after a fire).
- If used, the doors and windows of that room must be closed.
- The dehumidifier(s) must be plumbed in/or be emptied regularly **but** they must not collect the water in open containers, as the moisture will just be recycled back into the room.
- Monitor the rate of drying, as drying too quickly can cause damage.

**DO NOT ADD HEAT DUE TO INCREASED RISK OF MOULD GROWTH**

**SEE NEXT SECTION FOR: SALVAGE NOTES ON SPECIFIC MATERIALS**



## Salvage notes

- If objects are **dry**: keep them away from any damp/wet objects.
- If objects are **damp/ wet**: contact your Museums Development Officer who can provide you with the details of a Conservator, who will be able to advise you (if he/she has not been involved in the salvage).

*Please refer to appendix 4 for salvage notes on different materials. The materials relating to this room / area can be copied from that document and pasted into this section*

**SEE FOLLOWING SECTION FOR: ADVICE ON MOULD**



## Mould

Mould can grow in less than **48 hours**, which is why objects should be air-dried or frozen (if suitable) within this time.

It is not possible to identify a mould and whether it is harmful without laboratory testing, so it is safer to treat all mould as if it were harmful. The effects of breathing in mould spores over time are cumulative, and can lead to health problems in later life. Always take precautions when mould is present.

- Wear **nitrile / latex gloves** when handling objects.
- Wear a **face-mask** that is suitable for use with mould spores and particulates.

### Stopping mould growth:

- **Reduce humidity:** Mould can form at 65% relative humidity (RH) if there is poor ventilation. At 70-75% RH and above, mould will grow and remain active. **Use cold air fans to increase ventilation.**
- **Do not turn up the heat:** This will make it grow faster.
- **Dry or freeze wet collections:** This will not kill the mould but it will stop it growing until it can undergo conservation (not all objects can be frozen; check the materials list in this plan or ask the advice of a conservator).
- **Do not use bleach or domestic products:** These will cause additional damage and will not keep the mould from recurring.

## 7. *(Insert name of room or area here)* Emergency plan

### 7.2 Flood (water leak from above)

#### Basic procedures

On discovering a flood/water leak, speak to *(insert name of person who is responsible for the building maintenance)*, who will isolate water mains or stop the ingress of water.

#### Water leak (from above):

If water is dripping onto display cases:

- Assess the severity of the leak

And do **either** of the following:

- **Protect (cover) the case** with a large sheet of polythene and ensure that the water does not pool near the case base
- **Remove the object(s)** from the case **but** you must have all the equipment needed to hand **before** removing the case lid / opening the door of the case.

#### If objects need to be moved:

- Are some objects more at risk than others? (i.e. on a lower shelf or nearer the source of the leak)
- Are any of the objects at risk/affected on the **Priority for salvage floor plan**?

#### Where are you going to move objects to? (treatment areas to assess their condition):

**Either** of the following:

- *(insert the name of the area or room)* (onto floor or a table, which should be padded with blankets or foam, covered with acid-free tissue if objects are dry OR blankets and polythene if objects are damp/wet). Cordon off area, so people coming into room are kept away from objects.
- *(insert the name of an alternative area or room)* (onto floor or a table, which should be padded with blankets or foam, covered with acid-free tissue if objects are dry OR blankets and polythene if objects are damp/wet). Cordon off area, so people coming into room are kept away from objects.

*(Think about any local authority, other museum, friends or neighbour's buildings that you may be able to arrange to use in the event of a major emergency where you need to move collections off site)*



**IMPORTANT:** dry objects must be kept away from damp/wet objects. This needs to be assessed as objects are taken to treatment areas. **Ideally** there should be two areas: dry treatment area **and** damp/wet treatment area.

- Prepare treatment areas **before** objects are removed from cases.

**What do you need to move the objects?:**

- **Security screw drivers/ display case keys** **Important:** case lids to be left on/ doors to remain closed until objects are ready to be removed.
- **Latex/ nitrile gloves** to be worn when handling objects.
- **Scalpel/ small scissors** (to remove objects that are tied onto mounts). Do all objects need to be removed from mounts or can they be moved safely still attached to the mounts?
- **Trolleys** for moving boxes/ crates.
- **Boxes/ crates** for moving smaller objects. If there are not enough, objects will have to be unpacked at the treatment area and the boxes re-used.

*(Adapt this section for the specific room or area)*

**SEE NEXT SECTION FOR: SALVAGE NOTES (air-drying and dehumidifiers)**



## Salvage notes

### Air-drying:

- Can be undertaken with objects laid out over an area.
- **Bread crates** (stackable) can be used to lay objects in, as they allow air to circulate.
- A **wind-tunnel** can be created to aid drying **but** is not for use with objects that require slow air-drying. For example, polythene sheets can be draped over tables and the objects laid out beneath the table. A fan can be placed underneath the table at one end **but** the air must not directly blow onto any objects. Objects that require quicker drying can be placed nearer the fan.

### Dehumidifiers:

- Can be used in rooms to help dry out rooms that have been damaged by flooding (or are water damaged after a fire).
- If used, the doors and windows of that room must be closed.
- The dehumidifier(s) must be plumbed in/or be emptied regularly **but** they must not collect the water in open containers, as the moisture will just be recycled back into the room.

**DO NOT ADD HEAT DUE TO INCREASED RISK OF MOULD GROWTH**

**SEE NEXT SECTION FOR: SALVAGE NOTES (materials)**



## Salvage notes

- If objects are **dry**: keep them away from any damp/ wet objects
- If objects are **damp/ wet**: contact your Museums development Officer who can provide you with the details of a Conservator, who will be able to advise you (if he/she has not been involved in the salvage)

*Please refer to appendix 4 for salvage notes on different materials. The materials relating to the each room / area can be copied from that document and paste into this section*

**SEE FOLLOWING SECTION FOR ADVICE ON MOULD**



## Mould

Mould can grow in less than **48 hours**, which is why objects should be air-dried or frozen (if suitable) within this time.

It is not possible to identify a mould and whether it is harmful without laboratory testing, so it is safer to treat all mould as if it were harmful. The effects of breathing in mould spores over time are cumulative, and can lead to health problems in later life. Always take precautions when mould is present.

- Wear **nitrile / latex gloves** when handling objects.
- Wear a **face-mask** that is suitable for use with mould spores and particulates.

### Stopping mould growth:

- **Reduce humidity:** Mould can form at 65% relative humidity (RH) if there is poor ventilation. At 70-75% RH and above, mould will grow and remain active. **Use cold air fans to increase ventilation.**
- **Do not turn up the heat:** This will make it grow faster.
- **Dry or freeze wet collections:** This will not kill the mould but it will stop it growing until it can undergo conservation (not all objects can be frozen; check the materials list in this plan or ask the advice of a conservator).
- **Do not use bleach or domestic products:** These will cause additional damage and will not keep the mould from recurring.

## 7. *(Insert name of room or area here)* Emergency plan

### 7.3 Flood (Rising water)

#### Basic procedures

On discovering a flood, speak to *(insert to person who is responsible for the building maintenance)*, who will isolate water mains or stop the ingress of water.

#### Rising water:

- Assess the severity of the flood:
- How deep is the water?
- Is the water level still rising? If so, how fast?

*(Add a few sentences here about the potential risk of severe flooding, whether it has been assessed as being serious etc. Also, whether it is likely that the flood waters will reach a height as to cause damage to objects.)*

#### If objects need to be moved:

- Are some objects more at risk than others? (i.e. on a lower shelf or nearer the source of the flood)
- Are any of the objects at risk/affected on the **Priority for salvage floor plan**?

**Where are you going to move objects to (treatment areas to assess their condition)?:**

**Either** of the following (if unaffected/likely to be unaffected by flooding):

- *(insert the name of the area or room)* (onto floor or a table, which should be padded with blankets or foam, covered with acid-free tissue if objects are dry **or** blankets and polythene if objects are damp/wet). Cordon off area, so people coming into room are kept away from objects.
- *(insert the name of an alternative area or room)* (onto floor or a table, which should be padded with blankets or foam, covered with acid-free tissue if objects are dry **or** blankets and polythene if objects are damp/wet). Cordon off area, so people coming into room are kept away from objects.
- Prepare treatment areas **before** objects are removed from cases

*(Think about any local authority, other museum, friends or neighbour's buildings that you may be able to arrange to use in the event of a major emergency where you need to move collections off site)*

**IMPORTANT:** dry objects must be kept away from damp/wet objects. This needs to be assessed as objects are taken to treatment areas. **Ideally** there should be two areas: dry treatment area **and** damp/wet treatment area.

**What do you need to move the objects?:**

- **Wellington boots** (in correct size, otherwise tripping when handling objects is a risk).
- **Security screw drivers/ display case keys** **Important:** case lids to be left on / doors to remain closed until objects are ready to be removed.
- **Latex/ nitrile gloves** to be worn when handling objects.
- **Scalpel/ small scissors** (to remove objects that are tied onto mounts). Do all objects need to be removed from mounts or can they be moved safely still attached to the mounts?
- **Boxes/ crates** for moving smaller objects. If there are not enough, objects will have to be unpacked at the treatment area and the boxes re-used.
- **Trolleys** for moving grey bins/boxes (to be used in dry areas **only**).

*(Adapt this section for the specific room or area)*

**If the flood in this area is serious:**

- The person in charge must check Health and Safety procedures, and undertake risk assessments.
- The area may have to be pumped out by the Fire Brigade and salvage may not be able to start until the area is deemed safe. If this is the case, use the time to prepare salvage/treatment areas.
- Form a human-chain (if enough people are available) to move crates/objects. This saves person time and prevents congestion in tight areas.

**SEE PREVIOUS SECTION FOR: FLOOD (water leak)**



**SEE NEXT SECTION FOR: SALVAGE NOTES (air-drying and dehumidifiers)**



## Salvage notes

### Air-drying:

- Can be undertaken with objects laid out over an area.
- **Bread crates** (stackable) can be used to lay objects in, as they allow air to circulate.
- A **wind-tunnel** can be created to aid drying **but** is not for use with objects that require slow air-drying. For example, polythene sheets can be draped over tables and the objects laid out beneath the table. A fan can be placed underneath the table at one end **but** the air must not directly blow onto any objects. Objects that require quicker drying can be placed nearer the fan.

### Dehumidifiers:

- Can be used in rooms to help dry out rooms that have been damaged by flooding (or are water damaged after a fire).
- If used, the doors and windows of that room must be closed.
- The dehumidifier(s) must be plumbed in/or be emptied regularly **but** they must not collect the water in open containers, as the moisture will just be recycled back into the room.

**DO NOT ADD HEAT DUE TO INCREASED RISK OF MOULD GROWTH**

**SEE NEXT SECTION FOR: SALVAGE NOTES (materials)**



## Salvage notes

- If objects are **dry**: keep them away from any damp/ wet objects
- If objects are **damp/ wet**: contact your Museums development Officer who can provide you with the details of a Conservator, who will be able to advise you (if he/she has not been involved in the salvage)

*Please refer to appendix 4 for salvage notes on different materials. The materials relating to the each room / area can be copied from that document and paste into this section*

**SEE FOLLOWING SECTION FOR ADVICE ON MOULD**





## Mould

Mould can grow in less than **48 hours**, which is why objects should be air-dried or frozen (if suitable) within this time.

It is not possible to identify a mould and whether it is harmful without laboratory testing, so it is safer to treat all mould as if it were harmful. The effects of breathing in mould spores over time are cumulative, and can lead to health problems in later life. Always take precautions when mould is present.

- Wear **nitrile / latex gloves** when handling objects.
- Wear a **face-mask** that is suitable for use with mould spores and particulates.

### Stopping mould growth:

- **Reduce humidity:** Mould can form at 65% relative humidity (RH) if there is poor ventilation. At 70-75% RH and above, mould will grow and remain active. **Use cold air fans to increase ventilation.**
- **Do not turn up the heat:** This will make it grow faster.
- **Dry or freeze wet collections:** This will not kill the mould but it will stop it growing until it can undergo conservation (not all objects can be frozen; check the materials list in this plan or ask the advice of a conservator).
- **Do not use bleach or domestic products:** These will cause additional damage and will not keep the mould from recurring.

## **7.4 Priority for salvage floor plan**

*The floor plan for this room / area, showing pictures and descriptions of priority objects should be inserted here. See appendices 6 and 7 for guidance.*



## **8. *(Insert name of room or area here)* Emergency plan**

*(Complete a separate emergency plan for each individual room using the headings below and the relevant information from each section of Chapter 7)*

**8.1 Fire**

**8.2 Flood (water leak from above)**

**8.3 Flood (rising water)**

**8.4 Priority for salvage floor plan**

**8.5 Salvage recovery sheet**

## **9. *(Insert name of room or area here)* Emergency plan**

*(Complete a separate emergency plan for each individual room using the headings below and relevant information from each section of Chapter 7)*

**9.1 Fire**

**9.2 Flood (water leak from above)**

**9.3 Flood (rising water)**

**9.4 Priority for salvage floor plan**

**9.5 Salvage recovery sheet**

## 10. Emergency Plan: Insect and mould infestations

### 10.1 Insect infestation (actual or suspected)

#### Basic procedures

On discovering a suspected or actual insect infestation in your collections, follow these procedures. Isolate the affected object(s) from the rest of the collection; if the object is on loan to your institution or does not belong to your museum, contact the lender or owner **before** any further treatment is undertaken.

#### Suspected insect infestation

These guidelines are to be used if evidence of insects has been found on or around the object, such as moth cases or woolly bear skins, and / or there is damage to the object itself, but it is uncertain if it is fresh.

Isolate the object(s), suspected as having a problem, from others around them. This will:

- Prevent any potential infestation from spreading
- Allow you to monitor the object to see if an infestation is present

#### To isolate objects:

- **Smaller objects:**
  1. Place individual objects inside a polyethylene bag, squeeze out as much air as possible and seal up the opening of the bag with parcel tape.
  2. Label the bag with the object details (name and object number), the date of when it was placed in the bag and a sign saying 'Do not open- monitoring for insect infestation'.
- **Larger objects (too large to be placed in a bag):**
  1. Place each object on a large sheet of polyethylene and 'wrap' the object, so that it is completely enclosed and seal with parcel tape. Ensure that the edges of the polyethylene are folded over several times before they are securely taped. Try to remove as much air as possible from the package.
  2. Label the package with the object details (name and object number), the date of when it was placed in the package and a sign saying 'Do not open- monitoring for insect infestation'.

Monitor the object. If there are signs of an active infestation contact your Museums Development Officer, who will be able to advise you on treating the object.

## Actual insect infestation

These guidelines are to be used if insects have been found on the object or fresh damage is seen.

Isolate the object(s) from others around them. This will:

- Prevent the infestation from spreading

### To isolate objects:

- **Smaller objects:**

1. Place individual objects inside a polyethylene bag, squeeze out as much air as possible and seal up the opening of the bag with parcel tape.
2. Label the bag with the object details (name and object number), the date of when it was placed in the bag and a sign saying 'Do not open- insect infestation'.

- **Larger objects (too large to be placed in a bag):**

1. Place each object on a large sheet of polyethylene and 'wrap' the object, so that it is completely enclosed and sealed with parcel tape. Ensure that the edges of the polyethylene are folded over several times before they are securely taped. Try to remove as much air as possible from the package.
2. Label the package with the object details (name and object number), the date of when it was placed in the package and a sign saying 'Do not open- insect infestation'.

Contact your Museums Development Officer, who will be able to advise you on treating the object.

## 10.2 Mould Infestation

### Basic procedures

On discovering a mould infestation in your collections, follow these procedures. Isolate the affected object(s) from the rest of the collection; if the object is on loan to your institution or does not belong to your museum, contact the lender or owner **before** any further treatment is undertaken.

### Checking for mould

- Wear **nitrile / latex gloves** when handling objects. Wear a **face-mask** that is suitable for use with mould spores and particulates.
- Check if the material feels damp and/or there is a mouldy smell.
- In the early stages of growth, mould appears as a **fine web of filaments** (hyphae), often easily confused with dust, dirt and cobwebs. This is a general rule, but there are exceptions.
- In the later stages, mould develops a **bushy appearance**, and fruiting bodies containing spores can be seen under magnification. This is a general rule, but there are exceptions.

### Testing for mould

- Brush the mould with a fine natural hair brush (not a brush with synthetic bristles) to see if the mould is **dormant (dry and powdery) or active (soft and smeary)**. Active mould will continue to grow and damage collections. This is a general rule, but there are exceptions.
- Dormant mould will cause no further damage **unless** relative **humidity increases to 70-75% or more**, when spores germinate and mould becomes active. This is a general rule, but there are exceptions.
- Foxing on paper can be confused with mould. Foxing involves various agents of bio-deterioration, including mould. It appears as **red-brown stains** in discrete spots or irregular splotches, usually with no visible hyphae or mould structure. It appears in susceptible papers exposed to high relative humidity.

### Mould infestation

These guidelines are to be used if evidence of mould has been found on or around the object.

Isolate the object(s) from others around them. This will:

- Prevent any infestation from spreading



### To isolate objects:

- **Smaller objects:**
  1. Wear nitrile/ latex gloves when handling objects with a mould infestation. Also wear a face-mask, which is suitable for mould spores and particulates.
  2. Place individual objects inside a polyethylene bag, squeeze out as much air as possible and seal up the opening of the bag with parcel tape.
  3. Label the bag with the object details (name and object number), the date of when it was placed in the bag and a sign saying 'Do not open- mould infestation'.
  4. Place somewhere cool. The object should not remain in the bag for a long time as this will encourage further mould growth and damage, so contact your Museum Development Officer or conservator as soon as possible.
- **Larger objects (too large to be placed in a bag):**
  1. Wear nitrile/ latex gloves when handling objects with a mould infestation. Also wear a face-mask, which is suitable for mould spores and particulates.
  2. Place each object on a large sheet of polyethylene and 'wrap' the object, so that it is completely enclosed and sealed with parcel tape. Ensure that the edges of the polyethylene are folded over several times before they are securely taped. Try to remove as much air as possible from the package.
  3. Label the package with the object details (name and object number), the date of when it was placed in the package and a sign saying 'Do not open- mould infestation'.
  4. Place somewhere cool. The object should not remain in the bag for a long time as this will encourage further mould growth and damage, so contact your Museum Development Officer or conservator as soon as possible.

### Stopping mould growth

- **Reduce humidity:** Mould can form at 65% relative humidity (RH) if there is poor ventilation. At 70-75% RH and above, mould will grow and remain active.
- **Do not turn up the heat.** This will make it grow faster.
- **Dry or freeze wet collections.** This will not kill the mould but it will stop it growing until it can undergo conservation (not all objects can be frozen; check the materials list in this plan or ask the advice of a conservator).
- **Do not use bleach or domestic products.** These will cause additional damage and will not keep the mould from recurring.

# 11. Emergency Plan: Theft and vandalism

## 11.1 Theft

<b>Theft from museum collection</b>
-------------------------------------

**If theft is currently occurring: dial 999**

**When you suspect an object has been stolen:**

- Report the loss to the person in charge of security at your museum; they should then report this to the head of the museum.
- The head of the museum should contact the staff from different departments / sections of the museum, to ensure that the object has not been removed from its usual position for another reason (such as conservation treatment etc).

**If it is determined that the object has been stolen:**

- The head of the museum must call the **local Police** (*insert telephone number here*) to report the incident.
- Do not move anything from the area until the police have been to the museum.
- Telephone your insurers to inform them of the loss.

**Insurance company:**      (*Insert details here*)  
**Contact name:**            (*Insert details here*)  
**Telephone number:**       (*Insert details here*)

- If the object is on loan to your museum or does not belong to the museum, contact the lenders to tell them of the situation.

**To help with enquiries:**

- Provide any photographs of the object to aid identification; also provide dimensions and any other information that you think is relevant.
- Provide the Police with CCTV footage, if possible.

**If the building has been damaged by the thief:**

- Make the building secure temporarily, until proper repairs can be undertaken.

## 11.2 Vandalism

### Vandalism of museum building and collection

#### If vandalism is currently occurring: dial 999

##### **Building:**

When you notice that vandalism has occurred:

- Report the damage to the person in charge of security at your museum
- Call the **local Police** (*insert telephone number here*) to report the incident.
- If relevant, telephone your insurers to inform them of the damage.

**Insurance company:** (*Insert details here*)  
**Contact name:** (*Insert details here*)  
**Telephone number:** (*Insert details here*)

##### **To help with enquiries:**

- Provide the Police with CCTV footage, if possible.

##### **If the building has been damaged by the vandal(s):**

- Make the building secure temporarily, until proper repairs can be undertaken.

### Collections

#### If vandalism is currently occurring: dial 999

##### **When you notice that vandalism has occurred:**

- Report the damage to the person in charge of security at your museum, who should then contact the head of the museum
- The head of the museum should call the **local Police** (*insert telephone number here*) to report the incident
- Telephone your insurers to inform them of the damage

##### **To help with enquiries:**

- Provide the Police with CCTV footage, if possible
- Contact a conservator and arrange for them to assess the condition of the object.
- Do not move the object until the Police have been to the museum

## 12. Emergency Plan: Security threats

### 12.1 Security threats to your museum

#### These security threats could include the following:

- A threatening call directly to the building
- A threatening call received elsewhere and notified to you by the police
- The discovery of a suspicious item in the building
- The discovery of a suspicious item or vehicle outside your building
- The discovery of a suspicious item elsewhere notified to you by neighbours or the Police

The decision to evacuate your building will usually be undertaken by the museum concerned, but the Police will also advise you.

#### The evacuation procedures for this situation will differ to those required for a fire:

- Your assembly point needs to be much further away than that for a fire, at least 500 metres from the building (**but** car parks should not be used).
- Your evacuation route will have to be flexible, depending on where the threat is.

#### You can minimise the risks of these threats by undertaking the following:

- Consider displaying notices for staff and visitors, reminding them not to leave bags or personal belongings unattended.
- Think about anything in your buildings or collections that may cause offence or be controversial to some people.

## 13. Suppliers & contacts

*(Insert name, address, telephone and fax numbers of the following types of companies. These are only suggestions – please insert any information that is relevant to your museum)*

### Building Maintenance / Repairs

- Builders
- Plumbers
- Electricians

### Builders Merchants

### Conservation Organisations

- Drying equipment
- Freeze-drying companies

### Conservators

- For specific materials relevant to your collections
- Local and specialists further afield

### Conservation & Salvage Supplies

- Crate Hire
- Dehumidifier suppliers
- Demolition Companies

### Drain Cleaning

### Essential Services

- Electricity company
- Gas company
- Water company
- Telephone company
- Security company / intruder alarms

**Fans**

**Glass Replacement Companies**

**Industrial Cleaning Equipment**

**Insurance Company**

**Locksmiths**

**Portable Radio Hire Companies**

**Pump Hire**

**Removal Companies**

**Safety / Protective Clothing**

**Skip Hire**

**Temporary Accommodation / Storage**

- Local schools, town or village halls, sports centres
- Marquee hire
- Commercial estate / letting agents

**Tool Hire**

**Vacuum Cleaners (Wet and Dry)**

**24-hour Plant Hire**

## 14. Salvage kit

A salvage kit is a selection of equipment and materials that are stored (preferably **not** in your main museum building) for use in an emergency (however small or large). The contents should reflect the greatest risks identified by the risk assessment exercise. It should be easily accessible 24 hours a day, though kept in a secure area so that equipment cannot be taken from it and not replaced.

### Location of salvage kit

**Location name:** *(Insert details here)*

**Location address:** *(Insert details here)*

**Room number:** *(Insert details here)*

**Key number / name:** *(Insert details here)*

**Key kept where?:** *(Insert details here)*

*(Add any further information that is relevant)*

### Person responsible for upkeep of kit

**Name:** *(Insert details here)*

**Daytime tel:** *(Insert details here)*

**Home tel:** *(Insert details here)*

**Mobile:** *(Insert details here)*

### Date last checked

**Date:**

**Items needing replacing?:**

**Objects replaced when?:**

### Date next due

**Date:** 1 year from above date

# Appendix 1

## Guidance notes: How to use this template plan

The first task is to undertake a risk assessment exercise (review and update if you have existing assessments). Appendix 2 puts this in context. Also look beyond your own boundaries, especially if you share buildings and /or access with others.

Reduce as many risks as possible, and plan to reduce others. Bear this information in mind when preparing the emergency plan. Invite your local Fire Brigade and Police to visit.

### Completing sections 5 and 6

Appendix 3 contains a list of job titles and their suggested roles in the event of a major emergency. Don't Panic! The way to approach these sections is to first list the people that may be available to help and appraise them for their skills, abilities and likely aptitude in a stressful situation. Then go back to Appendix 3 and start to match them up. You can combine jobs and even change roles around; the important thing is to make the best use of the people available. Remember that your first choices may not be available in the event, so the template prompts you to suggest deputies. Most museums are concerned that they won't have enough people available for a major emergency, so also think wider afield: use section six to list friends, family, neighbours who don't normally play a role in the running of the museum but would be willing to help in an emergency. Finally talk to other museums who are bound to be experiencing the same resource restrictions as you – offer to be on each others lists. Devise a call out system.

### Section 7

Work on this section room by room because the more specific these can be the more useful they will be. If you then find that the information you are entering is in fact the same for more than one room, then you could combine into an area. Use appendices 6 and 7 to help choose priority objects for salvage and floor plans.

The Building Maintenance Checklist in Appendix 2 has been included as the majority of museum emergencies are due to a failure in building maintenance. Using a checklist like the one provided will help to reduce those risks.

Once you have completed your plan, adjust the section numbers beyond section 7 if necessary, and add page numbers. This will help when updating the plan and all copies. You need to have more than one copy of the plan, including one off site. Think carefully about where to keep copies; they need to be readily accessible when needed, but they contain a lot of sensitive information.



We recommend you check important information such as telephone numbers annually. The beginning of an open season is a good time to check priority object locations. Also review your risk assessments, and adjust the plan accordingly.

Test your plan. This can be as simple as imagining a situation and talking through the process, to a full-blown exercise involving the emergency services. Not only will you identify gaps and ways to improve your plan, but it will also train colleagues. Use the plan for minor emergencies. Familiarisation with the plan, building and collections is vital. If everyone knows their role and is confident about what will be required of them, then if an emergency occurs you will save valuable time and reduce stress.

## Appendix 2

### Risk Assessment

Emergency planning should aim to prevent emergencies occurring, and when they do occur, should reduce, control or mitigate the effects of the emergency. Emergency planning should be viewed as part of a cycle of activities beginning with risk assessment. This will highlight what you can do to reduce the likelihood of an emergency occurring and inform the priorities for the plan. Both risk assessments and the plan need to be reviewed and updated, continuing the cycle.

- Review history of incidents / emergencies in the museum or locality.

The following table may be useful.

- Identify all risks to the museum site, building and collection.

For example flooding from river or sea, leaks from roof valleys, fire from faults in old wiring, infestation from food sources.

- Rate risks according to probability and impact.

The higher the probability of something happening and the greater the impact, then the more urgent it is to deal with the risk.

- Prepare an action plan to remove or reduce risks.

Deal with risks that need little time or money, and plan when and how to deal with those that need more resources.

- Use the information to inform your emergency plan.

Choose relevant equipment and materials for the salvage kit.



<b>Incident</b>	<b>Damage</b>	<b>Cause</b>	<b>Date and duration</b>	<b>Action</b>
Example: Leak in store room 2	Cardboard boxes on top shelf rack A, contents undamaged	Blocked gutter causing overflow	20.11.07 2 hours	Gutters unblocked. Annual maintenance programme put in place – gutters cleared every autumn. Objects reboxed. Priority object moved to less vulnerable position. Polythene to protect top shelves.



## Appendix 3

Building maintenance checklist for *(insert name of your museum here)*

### External building checklist

	Frequency	Checked by whom?	Problem found?	Action taken	Check date	Due Next?
Guttering / downpipes for leaks, blockages & evidence of overflow						
Surface water drains for blockages / obstructions						
Rising main / hydrant servicing & check						
Rubbish disposal, check of site & procedures						

### Internal building checklist

	Frequency	Checked by whom?	Problem found?	Action taken	Check date	Due Next?
Water pipe systems for leaks / inadequate lagging						
Function & accessibility of stop valves (all systems)						
Function & accessibility of all down drain points						
Cellars / basements / roof spaces for evidence of water penetration						
Function of internal drains / sewers for blockages / obstructions						
Function & accessibility of circuit breakers						
Test of electrical circuits						

**Internal building checklist, continued**

	Frequency	Checked by whom?	Problem found?	Action taken	Check date	Due Next?
<b>Maintenance/check air-conditioning plant (including check of duct fire-shutters</b>						
<b>Fire alarm/emergency lighting servicing &amp; check</b>						
<b>Fire-fighting equipment (including sprinklers) servicing &amp; check</b>						
<b>Security systems (intruder alarms/CCTV) servicing &amp; check</b>						
<b>Electrical appliances servicing &amp; check</b>						
<b>Gas appliances servicing &amp; check</b>						
<b>Heating systems servicing &amp; check</b>						



## Appendix 4

### Emergency response team: roles

#### Overall Co-ordinator

- Contacts insurers
- Stays in one place and is available to make decisions
- Undertakes continuous risk assessments
- Acts as, or appoints media contact
- Supports team leaders
- Records events or delegates

#### Emergency Services Liaison

- Liaison with emergency services, Co-ordinator and Salvage Co-ordinator
- Responsible for security of site
- Responsible for control of access to the site

#### Communication and Support

- Helps communicate between salvage and recovery teams
- Passes messages, carries enquiries
- Monitors the human resources situation; organises breaks, identifies people who are not coping

#### Registrar

- Liaison with lenders

#### Chief Administrator (Quartermaster)

- In charge of resources
- Obtains materials/equipment on advice of others
- Deals with IT recovery and ensures collections databases are accessible for Recovery Team

#### Quartermaster Assistant

- Works with the chief administrator / quartermaster

### **Lead Technical Object Salvage**

- Leads salvage of objects requiring specialist handling and / or equipment (e.g. framed works, sculpture etc)

### **Technical Object Salvage**

- Supports the Lead Technical Object Salvage

### **Documentation**

- Object identification
- Documentation
- Allocating destination (wet/dry treatment)

### **Recovery Co-ordinator**

- Advising on all conservation matters
- Monitor H&S of Recovery Teams
- Wet / Damp Recovery Team Leader

### **Dry Recovery Team Leader**

- Oversees the dry recovery teams
- Advises on treatment and packing
- Liaises with Recovery Co-ordinator

### **Wet Recovery Team Leader**

- Oversees the wet recovery teams
- Advises on treatment and packing
- Liaises with Recovery Co-ordinator

### **Dry Recovery Team Member**

- Ensure that documentation is complete before objects are packed
- Packing of objects
- Liaison with Dry Recovery Team Leader

### **Wet Recovery Team Member**

- Ensure that documentation is complete before objects are packed
- Drying of objects or packing for further treatment
- Assessing condition
- Liaison with Wet Recovery Team Leader

### **Salvage Team Members**

- Removing objects from display or storage areas, sending them to the relevant treatment areas
- Takes instructions from the Recovery Co-ordinator

### **Volunteers**

- Formation of human-chain to speed up the transit of objects to the recovery areas
- Acting as runners to pass on messages and to collect materials for the recovery teams, when requested
- Preparing materials for the recovery teams
- Help with refreshments
- Take instructions from the Communication and Support and Recovery Co-ordinator

## Appendix 5

### Salvage notes: Materials

*(Copy and paste the materials relevant to your collections into the designated section of the emergency plan for each room/ area)*

#### Basket (vegetable fibres)

- Rinse with clear water if dirty.
- Drain and blot to remove excess water.
- Stuff with clean, undyed paper towels or cotton sheeting to retain the shape and to absorb stains.
- Cover with clean paper towels. **Air dry slowly.**
- Change blotting material regularly.

#### Bone, shell and ivory

- Ivory: **do not wash.**
- Bone and shell: Rinse with clear water, if dirty.
- Drain and blot to remove excess water.
- Place on blotting paper to **air dry** Change blotting material regularly.

#### Books

- Flood or fire present serious problems: burning, charring, smoke, soot and water damage (from fire-fighting as well as flood).
- Most of these require the services of a conservator, but first aid in situ may be needed.

#### Wet books:

- Do not rinse wet books if dirty, but keep the book closed.
- Clean gently with undyed cotton cloths or paper towels before opening the book, then allow it to **air dry** in cool air (**never** force-dry a wet or damp book using heat).
- If possible, **air dry**; stand up books that are strong enough on one end with pages fanned out to provide air circulation.
- For other books, interleave every few inches with blotting paper, change when wet.
- **Do not** try to force apart the pages of a drying book. They will separate as they dry out.
- **Do not** try to shut books that are found open.
- Very wet: wrap in freezer paper or waxed paper (**not** in acid free tissue paper), pack in crates spine down and **freeze.**

- Shiny 'art' paper (e.g. used for printing illustrations) is heavily 'loaded' with china clay, and if left to dry the pages will settle into a solid mass. Try to separate sheets of art paper from each other and from text paper as they dry, using polyethylene sheets or silicone release paper as interleaving.
- Wet books can be heavy; handle with extreme care to prevent damage
- Create a drying tunnel if there are large amounts of books that need drying (see separate section on air-drying). If used, ensure that electric fans blow cold and do not ruffle or disturb the pages.
- During drying, check books for signs of mould growth. If they cannot be dried within 48 hours, a conservator will arrange freeze drying.

#### During an emergency, salvage books from shelving in the following order:

- Take books from the bottom shelf first, but if the shelves are unstable, then work from the top shelf down.
- Pack in separate categories of dry, damp and wet (dry books need to be prevented from becoming damp/ wet).

#### Books should be treated in the following order:

1. weak and wet books
2. weak and damp books
3. strong and wet books
4. strong and damp books

### Ceramics and glass

- More susceptible to damage from heat than from water.
- Identify the ceramic type and consult a conservator on drying procedures.
- If broken, cracked, has mineral deposits or old repairs, the ceramic should be placed in a clean, transparent polythene bag until it can be treated. Seal the bag and monitor for mould.
- If ceramic or glass is dry, never wet unglazed ceramics, damaged glazed earthenware or soft paste, repaired or restored areas, gilded decoration or painted glass, or early (pre-1700) glass.

### Clocks and watches

- The metal movements of clocks and watches will be very badly damaged if they get wet.
- **Quick treatment is essential.** If objects are very wet, only carry out gentle blotting where accessible. **Do not** attempt to clean.
- **Contact horological conservator** as soon as possible for further advice.

### Furniture

- Care must be taken when moving furniture as glues on joints and veneers will loosen and gesso can dissolve.

- Blot dry all accessible areas (**Do not** rub or wipe), changing the blotting material regularly.
- Areas of marquetry, lacquer and painted surfaces are particularly fragile.
- **Do not** blot gilded areas, as these surfaces are extremely fragile.
- Remove drawers, open doors and let the furniture **Air dry slowly**. Damp/wet furniture: **Do not freeze**.
- Use an electric fan (set to cool) to improve the ventilation during the drying process, **but** do not allow the air to blow directly on any objects.
- If larger pieces of furniture cannot be moved, cover them with polyethylene sheeting, removing the sheeting when there is no longer a risk from water damage.
- If floors are wet, stand the furniture on blocks of wood wrapped in polyethylene (blocks should measure 4 x 4 x 3 inches), which will prevent the water from travelling through the wooden blocks into the furniture.

### Leather

- Rinse/ sponge with clear water to remove mud (if present).
- Drain and blot to remove excess water.
- Pad with towelling or newsprint (unprinted) to maintain the shape of the object.
- **Air dry**. Manipulate tanned fur skins during drying to keep them flexible.

### Metals

- Moisture can seriously damage metals.
- Wear latex / nitrile gloves when handling.
- Salvage areas should be **warm and dry**, in contrast to conditions normally required for other objects.
- Damp/wet: **Do not freeze**.
- If suitable, rinse / sponge and blot the metal object. Pay particular attention to decorative areas.
- IF an object has an applied finish (e.g. gilding or paint), **Do not** clean.
- **Air dry objects as quickly as possible** (e.g. with an air tunnel), **unless** the object has an organic component (i.e. made from a material of animal or plant origin, such as leather or cotton), then **dry slowly**.
- Keep flaking surfaces horizontal.

### Natural History (shells, fossils, insects, birds' eggs, skins and stuffed animals)

- Swab off any excess water with kitchen roll (**do not** use blue paper towels).
- Fur and feathers should only be wiped in the direction of the hair or feathers.
- **Damp**: Leave in a cool dry room with good ventilation (use electric fans to improve ventilation but do not allow the air to blow directly onto the specimens).

- **Wet:** If skins and furs have become soaked, place in a polythene bag and **freeze** them; they can be freeze-dried at a later date.
- Skins can crack open and burst when drying out.
- Some items may not be very well cured and moisture could cause decomposition and further complications. Seek advice from a conservator immediately.

### Paintings on canvas

#### Wet:

- Require **urgent attention**. Wet paint and ground layers: there is a great risk of flaking. Contact a conservator
- Wet paint and gilded frames: handle with care as surface is easily removed when touched
- Carry the painted surface away from the body, to minimise the risk of clothes rubbing against the painting's surface
- Remove the canvases from frames in a safe, dry place. **Do not** separate canvases from their stretchers (wooden bars)
- Place paintings on blocks to lift them off the surface (this allows air to circulate); keep paintings horizontal and paint-side up, with nothing touching the surface. Avoid direct sunlight.
- **Do not** stack wet paintings / frames against each other
- Wet paintings may turn white: this can be reversed by a paintings conservator, if the damage is mainly to the varnish layers

#### Dry:

- Torn or scratched paintings can be treated at a later date
- Place framed and glazed paintings in a sturdy crate and put padding between items before they are moved (e.g. acid-free tissue covered rolls of bubble wrap)
- Can be stacked **vertically**, with no more than four similarly-sized paintings in each stack. Stack **front-to-front, back-to-back**. Never lean a frame against the canvas of another painting.
- **Do not** rest directly on the floor; use foam blocks or similar

### Paintings (general)

- Paintings and their frames are delicate and should be handled with care.
- Both fire and water can cause damage.
- Unglazed works are at risk from scratching and abrasion. Keep away from sharp objects (e.g. belt buckles and key fobs) and do not place pressure on the canvas.
- If moulding detaches from a frame, place in a sealable polythene bag and label it (which frame it came from).
- Large paintings, however important, may have a lower priority for salvage because of the difficulty in moving them.

- Protecting in situ: Use polythene sheeting to protect painting from smoke and water damage, when it is impractical to remove them.
- Glazed works: many of the works will be very heavy. Use **two** people to carry / move them (very large works require more people).
- Lift pictures by their frames and not their stretchers.

### Paper/ prints (see separate section for books)

Paper is very susceptible to damage and should be considered a priority item for attention

#### Wet:

- Handle with care, as wet paper can be weaker and heavier. Use support for moving if necessary, e.g. Melinex (polyester).
- Lay out separately on blotting paper (do not stack as they may stick to each other). Change blotting paper every 2-3 hours.
- **Air dry** using a good cool air circulation, do not add heat.
- Contact a Conservator as soon as possible.
- Monitor for mould growth (see separate section in this emergency plan on preventing mould).
- Do not attempt to separate or unfold sheets that are stuck together.
- Do not attempt to pick pieces up unsupported; use Melinex sheets for sliding under paper items floating in water. The paper will stick to the Melinex, which then acts as a support.
- Do not place next to dry objects or water.
- **If air-drying is not possible, freeze or pack in polythene bag** and store in cool dark place and contact conservator immediately.

### Photographs

- The emulsion of a photograph will become sticky and may stick to other objects.
- Mould grows very quickly on photographs, particularly if gelatine is present; inform a conservator immediately if mould growth occurs.
- **Do not freeze.**
- If wet and contaminated with dirt, rinse in a bowl of clean, cold water; **Do not** rub or wipe the surface.
- If wet, separate from each other carefully, spread out and **Air dry as quickly as possible** (lay flat, image side up, on blotting paper).
- **Do not** dry with a hairdryer / with other heat source.

### Plastics

- Fire/ heat: thermal stress can cause physical damage to a plastic material.
- Handle with care to avoid scratches.



- Contact a conservator for advice.

### Stone, sculpture and plasterwork

- Marble, stone, scagliola and plaster are porous and will absorb water and dirt. Alabaster will dissolve in water. **Do not attempt to remove soot or smoke damage.**
- Damp /wet stone: **Do not freeze.**
- Use trolleys to move smaller pieces (reduces the risk of damage through dropping).
- Smooth-surfaced stone should be blotted gently, **but** not if there is an applied surface (e.g. paint).
- Rough-surfaced stone / stone with a surface finish: **Do not** blot dry. Put on a plastic sheet or in a bread crate (air can circulate).
- Check for efflorescence of salts (salts appearing on the surface as the stone dries), contact conservator if this occurs.
- Sculpture may be too heavy to remove. Cover in situ with polythene to protect from water damage (do not use any covering where the dye can transfer to the object).
- Wooden blocks (measuring 4 x 4 x 3 inches) covered in polythene can be placed under objects that cannot be moved, to raise them off the ground and prevent the absorption of water.

### Textiles

- Damp / wet textiles can be easily torn or dyes can run to other areas of the object (they are heavier and weaker when wet).
- **Do not** unfold delicate fabrics.
- **Do not** stack; allow for a large area to lay out textiles when drying.
- Drain and blot with clean towels, kitchen roll etc to remove excess water (**never** wring out a textile).
- Shape and pad out items to their original forms using nylon netting as padding.
- If possible, isolate metal fixings to prevent corrosion by using acid-free tissue.
- **Air dry objects or freeze** (**but** do not freeze if object is of composite materials e.g. with wood, metal etc without further advice).

### Wood

- Damp/wet: remove excess moisture from surface by blotting gently using kitchen roll.
- **Air dry slowly** to prevent warping and shrinkage.
- Check painted surfaces for blistering/flaking. Contact a conservator if this is a problem.

## Appendix 6

### Guidance notes: Choosing priority objects for salvage

Which objects / collections are most important to the museum? This can be based on several factors such as:

1. The rarity of an object
2. Its value (though this should not be the sole consideration)
3. An important historical link to the museum
4. Its vulnerability to fire, flood, etc

#### **Most susceptible to water damage:**

Paper; textiles; iron objects (iron objects will deteriorate in the presence of water, so should be dried off and separated from other objects so they do not cause staining).

#### **Moderately susceptible to water damage:**

In general ceramic, glass, stone and metal objects (excluding iron) are more resistant to water damage; during an emergency they should be separated from objects requiring priority treatment.

#### **Objects stored on the floor / low shelves:**

These are more susceptible to water damage in the event of flooding; all material should be stored at least 10cm above floor level. If your store is in a basement where water cannot drain away easily, all objects should be kept one metre above floor level.

Some objects that you may want to put on a priority salvage list may not be moved easily (e.g. may require specialist lifting equipment that you do not have). In these cases you should think about what can be done to reduce the risk of damage.

#### **Example actions that can be taken prior to an emergency**

- Move objects away from possible hazard and / or closer to
- Change method of display or storage of object to aid removal
- Locate protection materials close to object, e.g. Polythene sheeting cut to size, polythene covered wooden blocks
- Record object thoroughly in case of loss

## Appendix 7

### Guidance notes: Floor plans showing priority objects

These floor/ room plans, which will help in the salvage and loss control, should show the following:

- Key features of the building
- Where the **priority objects for salvage** are located

The plans should be laminated so that they are durable for use in an emergency situation. More than one copy of each may be useful. Plans should show the following information:

1. Room name and number, with entrances clearly indicated, and key numbers if relevant.
2. An image of the priority object(s).
3. Give the object a simple name; avoid using technical terms. State whether it is a 2D object (e.g. a framed picture) or a 3D object (e.g. a statue). A brief description of the object may also be useful; in case labels are missing or destroyed (e.g. description of the scene in a painting). Only put the accession number on if it is on the label and therefore would aid identification. Dimensions of the object can make identification easier, use both metric and imperial.
4. Make a note of how it is displayed (e.g. screwed to a wall with Philips screws or using a specialist hanging system) and what equipment is needed to remove it from display. Bear in mind that it may not be a museum worker removing the objects, and it may be a member of the fire brigade, so the information needs to be as clear as possible.
5. Label the floor plan as '1 of ...', so that the people undertaking the salvage can see how many objects have to be salvaged.

The plans do not need to be computer generated; simple hand drawn ones will do the same job, as the example shows.

If any changes are made to the layout of rooms, the location of the priority objects or the choice of priority objects themselves, then a new set of plans should be produced.

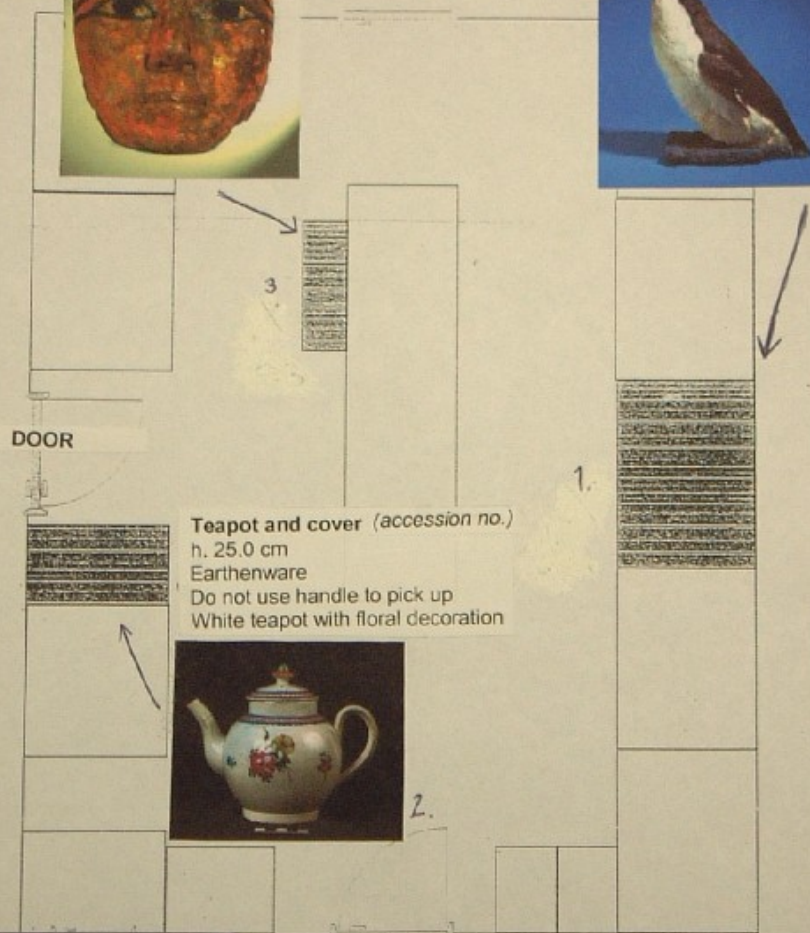
A set of floor/ room plans showing priority objects can be given to the local Fire Service, so that they can familiarise themselves with them.

**PRIORITY FOR SALVAGE FLOOR PLAN**  
Plan: 1 of 4  
(3 objects)

**Mummy mask** (*accession no.*)  
h. 25.0 cm x w. 21.0 cm  
Cartonage, paint  
Painted Egyptian face mask



**Great Auk** (*accession no.*)  
h. 75.0 cm  
Mounted bird specimen  
Large black bird with white front & white markings on head



**Teapot and cover** (*accession no.*)  
h. 25.0 cm  
Earthenware  
Do not use handle to pick up  
White teapot with floral decoration



**F06**  
**OUTER STORAGE**  
**GROUND FLOOR**  
  
Room key no.: 28  
Cabinet key no.: 12a; 4; 16

↑  
DOOR

## Appendix 8

### Salvage kit contents

The contents of a salvage kit need to reflect the most likely emergencies at the institution. Contents can be built up over time. Some contents will have a shelf life and need replacing periodically. The following lists are suggestions and you will need to prioritise and think about any other site specific items that you may need.

#### Container for kit

Needs to be easily movable; may need more than one crate to reduce weight. Wheelie bins, wheeled plastic crates and tool boxes have been used with success. It could contain a separate first aid kit.

#### Wet recovery materials

Mop  
Bucket (square ones better for scooping up water)  
Dustpan  
Brush  
Absorbent materials (e.g. squeegees, booms, plain newsprint, no-dye paper towels, kitchen roll, blotting paper)  
Plastic trays and crates

#### Recording materials

Salvage recovery sheet  
Clipboard  
Pencils  
Waterproof pens  
Notebook  
Waterproof (Tyvek) labels  
String  
Scissors

#### Tools and equipment

Torch (windup or with spare batteries)  
Extension lead  
Screwdrivers  
Stanley knife  
Parcel tape  
Claw hammer  
Pliers  
Crowbar  
Holepunch  
Webbing tape  
Carrying straps

#### Materials

Polythene sheeting

Bubblewrap  
Acid free tissue  
Plastazote  
Dust sheets  
Fire blankets  
Freezer bags  
Bin bags

**Protective clothing**

Waterproof coveralls  
Gloves (variety)  
Goggles  
Masks  
Wellington boots  
Hard Hats  
Hi viz waistcoats with i.d.

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