LIVERPOOL HOPE UNIVERSITY

Archives & Special Collections Salvage Plan

Online Version

INTRODUCTION

This document describes the roles and responsibilities of university staff in a salvage operation following a response to an emergency within Archives & Special Collections. An emergency is anticipated to pose a significant risk to The Sheppard-Worlock Library's Archives & Special Collections, including its staff and students. This document will support the mobilisation and operation of the Library Salvage Team who would be responsible for managing the collections after any such crisis.

Definition of an emergency

An emergency is any incident that threatens human safety and /or damages or threatens to damage or destroy The Sheppard-Worlock Library's buildings, contents, facilities or services. The most serious threats arise from fire or flood that can emanate from various sources. This document deals with what happens after one of these incidents. The University has other policy documents that provide guidance to staff in response to these threats, including the Library Code of Consideration, Major Incident Plan, and Fire Safety Policy.

Aim of the salvage plan

The plan is intended to provide the procedures and basic guidelines to be followed in the event of an emergency, enabling staff to act swiftly to minimise damage to the collections. The Sheppard-Worlock Library is committed to ensuring the safety and security of its staff and the public at all times. This plan is coupled with a risk management program to reduce the likelihood of an emergency incident.

In a major emergency, the plan will function alongside the Major Incident Plan, Business Continuity Plans of Liverpool Hope University, the Governing Body, the Emergency Services and the Business Continuity Agreement with NoWAL partners (North West Academic Libraries).

The Emergency Services will stand down when the emergency is under control and their investigation works are complete. They may assist with removal of collections from the building whilst they are still in control and barring access to the building. Estates will be responsible for ensuring the building is accessible and safe to work in (e.g. pumping out water, providing dehumidifiers, emergency lighting, temporary accommodation, generators etc.). Only then, will the Library Salvage Team implement the Special Collections Salvage Plan. At no stage is any member of staff or volunteer expected to put themselves in danger in a salvage situation. Health and safety will be properly assessed and adequate personal protective equipment provided.

Circulation of the plan

A copy of the plan is held in the Disaster Recovery File in the Crisis Kit stored in the Security Lodge and in the Library safe.

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For security reasons and for compliance with General Data Protection Regulations (GDPR), certain documents have been removed from this open access version of the Special Collections Salvage Plan, readily available from the university's website.

LIBRARY SALVAGE TEAM

In the event of an incident, the following personnel have been allocated the following roles in order to manage the situation. It is important that tasks be delegated to prevent one person trying to manage the entire operation.

Role	Staff Member
Damage Manager	Director of Estates
Collections Salvage Manager	Director of Library & Learning Spaces
Salvage Operations Coordinator	Special Collections Librarian
Rectorate Team Link	Pro Vice Chancellor Student Life & Learning
Service Continuity Manager	Deputy Director of Library & Learning Spaces
Security	Campus Manager
Salvage Operatives	Volunteer staff from the Library and Estates

The Library Salvage Team will liaise with the Major Incident Team and co-opted members (depending on the nature of the incident) as defined in the Major Incident Plan. The role of the Library Salvage Team is to respond quickly and effectively, formulate a strategic response to the incident and ensure the swift resumption of the University's core activities. To assist the operational recovery, finance and resource allocation will play a significant role, as too, will the reputational risk posed against the institution.

Training

The Library Salvage Team will receive training in the contents and purpose of the plan within the first two months after issue, and annually thereafter. Library staff and volunteers will receive basic training in what to do in the event of an emergency. This basic training will be extended to new personnel as necessary. The responsibility for organising training will be the Deputy Director of Library and Learning Spaces.

STARTING SALVAGE

As soon as the building is declared safe to enter, the Damage Manager, Collections Salvage Manager, Service Continuity Manager and the Salvage Operations Coordinator should enter to make an assessment. They should ascertain

- All areas affected
- Nature of damage (water / dry smoke damage)
- Check all priority collections for damage
- The linear length of water-damaged stock
- The types of material affected (bindings, maps /plans, framed material etc.)
- Extent of penetration of water into boxed manuscripts.

Upon completion of assessment, the Library Salvage Team should formulate a salvage strategy and action plan. The document in appendix A sets out the measurements taken to reduce the risk of damage to the collections. The scale of a potential incident and the collection material type, i.e. manuscripts, early printed books, and archives can determine the course of action in the salvage operation.

As part of the NoWAL consortium, The Sheppard-Worlock Library has a subsidised priority user membership with Harwell Documentation and Restoration Services for disaster recovery support in the event of an emergency, details of contract entitlements are shown in appendix B and benefits are also highlighted on their website. Salvage and packing of damaged items should commence before the arrival of Harwell and a documentation system established so that moved items can be easily tracked (appendix H). Photographic evidence should be obtained to record the extent of the damage and the salvage operation.

ROLES AND RESPONSIBILITIES

Collections Salvage Manager

Responsibilities

- Make contact at site with Damage Manager and Security and arrange on-going liaison
- Ensure Library Salvage Plan is available
- Decides who should be co-opted to the Library Salvage Team to provide specialist advice

Immediate actions to be completed

- Participate in the emergency assessment
- Decide whether the building should be closed to facilitate salvage, and for how long, and update webpages accordingly
- Alert Salvage Team Procurement Manager to notify insurers
- Ensure that a risk assessment has been carried out before the salvage operation commences
- Liaise with the Communications Manager to notify governing body, stakeholders and all interested parties about the incident
- Prepare log to maintain record of events
- Invoke Business Continuity Plans where applicable

As the salvage operation progresses

- Brief the Library Salvage Team and provide regular updates
- Allocate roles and responsibilities
- Support the Library Salvage Team in arranging resources identified as required for the recovery effort
- Arrange for regular meetings of staff to review progress
- Closely monitor the timescales for recovery and identify solutions to speed the salvage process up where necessary
- Re-evaluate risk assessments
- Liaise with other institutions for assistance (space, people, equipment, expertise)

After the salvage operation is completed

- Ensure that appropriate remedial work is undertaken to avoid repetition of the emergency source
- Conduct a review of the performance of the plan
- Thank those members of staff who were involved in the recovery operation
- Obtain quotations for restoration companies /conservators for any drying /cleaning work that can be outsourced and discuss with the Procurement Manager.

Service Continuity Manager

Immediate actions to be completed

- Notify all relevant personnel who will be required for the recovery effort
- Participate in the emergency assessment
- Decide whether the building should be closed to facilitate salvage, and for how long, and update webpages accordingly
- Maintain an incident log and arrange for the salvage operation to be photographed
- Liaise with the Communications Manager
- Call your emergency salvage contractor if necessary
- Organise welfare for staff involved in the recovery effort.

Salvage Operations Coordinator

Responsibilities

- Protection and avoidance of damage to unaffected collections
- Minimisation of further deterioration to the damaged material after the point of discovery
- Salvage, removal and treatment for the damaged material
- Prioritisation of the damaged items for recovery
- Communication of handling techniques to staff
- Liaison with Harwell Documentation Restoration Services
- Restoring the general storage environment after damage.

Immediate actions to be completed

- From initial projections of the damage count, decide on whether specialist contractors /external assistance will be required to assist and liaise as appropriate
- Identify a suitable triage /holding area for damaged collections
- Liaise with Estates to source all materials required for the salvage operation. This may include crates, trestle tables, blotter, tags, polythene bags. Liaise with the Collections Salvage Manager over funding
- Establish a schedule for salvage
- Establish a documentation system for tracking items (appendix H)
- Create teams for the salvage operation and ensure that conservation and collections handling skills are mixed. Ensure that staff are briefed on Health and Safety, PPE, documentation and handling techniques before salvage begins. A PowerPoint presentation is available for staff training (stored in Salvage Equipment Kit, Special Collections Open Access Room, behind the lockers).
- Photograph scene before any items are moved and try to take photographs throughout.

As the salvage operation progresses

- Monitor timescales per shelf very carefully – if the timescale for removal of all materials is likely to exceed 2-3 days, look for ways in which the timescales can be improved and be prepared to change tactic (reduction in material to be air-dried due to space/time constraints). Even if the quantity is small, it may still be appropriate to call your emergency salvage contractor
- Think ahead as to the requirements for equipment such as crates and ensure they are delivered to schedule
- Work with Estates to monitor the environmental conditions in the store affected with a view to the protection of unaffected material still in situ
- Remove the polythene sheeting from shelving when the immediate threat of damage is over
- Keep staff motivated throughout salvage process
- Assess whether mould growth is an issue and re-evaluate risk assessments if so.

After the salvage operation is completed

- Replace all used equipment from the Disaster Preparedness Kit
- Ensure that appropriate remedial work is undertaken to avoid repetition of the emergency
- Do not re-shelve anything that was water-damaged into the store until you are satisfied it is thoroughly dry. It may be advisable to quarantine for a period of 6 weeks and monitor for signs of mould growth
- Obtain quotations for restoration companies /conservators for any drying /cleaning work that can be outsourced and discuss with Collection Salvage Manager
- Conduct a review of the performance of the plan
- Thank those members of staff who were involved in the recovery operation.

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SALVAGE GUIDELINES

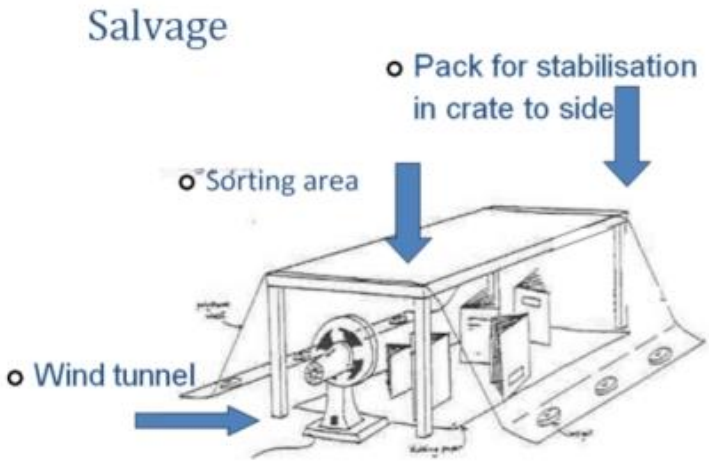
There are four key activities for the salvage of damaged objects.

SALVAGE
SORTING / TRIAGE
TREATMENT
STABILISING / PACKING FOR FREEZING

Minor incidents

In the event of a minor incident, it is possible for a small team to salvage, sort, dry and pack those items to be stabilised without needing to create separate teams, however, the same instructions should be followed.

Materials should be salvaged and moved in crates, then transferred to a separate assessment area. The top of the table should be the sorting area; items for freezing/stabilisation can be packed in a crate to the side of this table. A wind tunnel can be created underneath the table and spare floor space around used as extra drying space. Washing lines can be created around the legs of chairs or tables for items that can be hung to dry (damp files, pamphlets).



Major incidents

In the event of a major incident, it may be advisable to assess items for the best treatment options at the site of salvage, to reduce space taken and manual handling and for the majority of items to be frozen. Ideally all material wetted should be stabilised or drying within 48 hours of becoming wet. Bear in mind that if the quantity is large, then the most prudent course of action may be to stabilise the vast majority of damaged material even if individually the items *could* be air-dried, because simply due to the quantity it will take several days or weeks to process all material.

Salvage after fires

In the aftermath of a fire, prioritise wet items initially. When all wet items have been salvaged, attention can turn to smoke and fire damage. Ensure that all fragments are gathered and bagged or crated with the object. Get advice from a conservator over treatment options. Smoke residues can be removed through careful cleaning, but advice should be obtained before this commences. Smoke residues are acidic and should not be left untreated for a long time.

Salvage

- Items should not be sorted /triaged at this stage, but at the sorting area
- Salvage should only start when all members have been briefed and the triage area is set up
- Protect unaffected material with polythene sheeting if this has not already been done
- Establish a documentation system so moved items can be tracked [appendix H]
- Clear floor areas first to prevent further damage and to ensure safety of team members (likely to be most badly affected material)
- Clear high priority items first
- Thereafter remove damaged items systematically, ensuring that a record is kept as far as possible of where material comes from [appendix H]
- Use minimal force to remove tightly wedged material. Two people may be needed. Try to push from behind rather than pull or lift from the lowest load-bearing member
- All material should be left, as it is found – open, closed, dirty
- Try to isolate in bags items that are obviously leaching or disintegrating
- Move items into crates where possible to reduce risk of damage through direct handling, even if boxed, or if items are in cabinet drawers, remove the entire drawer rather than the individual items where possible
- Transfer to sorting / triage area.

Equipment: PPE as required, Crates, Trolleys, Documentation Kit, Emergency Preparedness Kit.

Sorting /Triage

- Any material in boxes, drawers or an enclosure, should be checked immediately – it may be that the contents are not wet. If so, remove these into a new box or temporary crate, together with the original box label. This will prevent these items from needing further treatment.
- Team members will be required to place items into different categories of damage, where possible by type of collection
    - Undamaged material - take to safe area
    - Wet material /saturated that can be frozen – pass to packing team
    - Wet material /saturated that cannot be frozen – pass to treatment team
    - Minor water-damage – pass to treatment team
    - Fire Damage only (not wet) – store temporarily
    - Mould damaged material – pass to packing team to be bagged
    - For further assessment (items which are dirty, stained, distorted) – pass to treatment team

- If there is a large mixture of damaged material, it may be sensible to freeze collections where possible to concentrate on items that require immediate attention and cannot be stabilised
- Documentation should continue.

Equipment: PPE as required, salvage operation kit, documentation kit incl. damage lists, crates, tables

Treatment

- This is required for material that has received minor water-damage or saturated items that cannot be frozen.
- The Salvage Operations Coordinator will designate an area for air-drying
- Use fans and dehumidifiers to assist drying, but not too near the items and do not apply heat
- Use hand-held water sprays or sinks with a gentle stream of water, if necessary, to remove surface deposits, but do not rub or brush material
- Cover table tops with sheets of polythene, then blotting paper. The area under the table can be a wind tunnel for fast drying using a fan. Area on top of table for slower drying
- Lay items for drying wet side down on newsprint paper. Change paper regularly as it becomes sodden
- Interleave within the item with newsprint or silicone backed paper, to increase absorption if possible but taking care not to alter the shape of the item
- Erect washing lines to dry single sheet items such as photographs, robust modern textiles etc.
- Do not attempt to separate material found stuck together – pass to a conservator
- If minor water-damage remains untreated after 24 hours and workflow indicates it will be more than 24 hours before it is treated, pass back to packing /freezing team as it may go mouldy before it is dry
- Return empty crates to salvage team.

Equipment: Air drying kit, PPE, tables, salvage operation kit, polythene sheeting, documentation kit, dehumidifiers and fans

Stabilisation /Packing Team

- Items which are saturated and cannot be air-dried should be frozen in crates, except the items that are NOT SHADED in grey in the table on the following page. These items MUST be air-dried.
- Excess moisture that can be drained should be removed (liquid water in archive boxes should be removed through making a small hole in the bottom of the box, not through tilting the box).
- All items to be frozen should be bagged or wrapped in polythene, where possible, if time allows. If time is constrained, only bag those items with leaching dyes or items that are disintegrating
- Some items that cannot be frozen can be kept wet. Use solid crates for this purpose.
- Specific guidance on packing for freezing is contained per item in the object specific guidance table below.

Equipment: PPE, crates, salvage operation kit, documentation kit, trolleys, polythene bags from air-drying kit.

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APPENDIX A - PREVENTATIVE MEASURES TO REDUCE RISKS

Wording in loan agreement

Liverpool Hope shall restrict access to the Collection to the extent it considers necessary to preserve the physical condition of the Collection.

Liverpool Hope undertakes to use its reasonable endeavours to safeguard the Collection against theft, wilful and accidental damage and fire, through appropriate risk management measures, but shall not be obliged to insure the Collection against such risks.

If the Collection or any part of it is damaged or destroyed so as to make it impossible or impracticable for Liverpool Hope to fulfil any of its obligations under this Loan Agreement, Liverpool Hope shall be excused from fulfilling any such obligations and there shall be no claim for damages or loss against Liverpool Hope (whether in contract, tort or otherwise) arising or resulting from such damage or destruction.

Preventative measures in place

Theft:

- Rare material to be stored in a secure vault off the main reading room with the key stored in a safe in a staffed building overnight/weekends
- Access to the reading room is swipe controlled with only a limited group of staff with access i.e. library and security staff
- All visitors to the reading room have to sign in and external visitors have to make an appointment in advance of their visit and indicate the items they wish to consult
- Visitors, including researchers, students, staff and maintenance operatives, are escorted at all times by library staff if access to the vault is necessary
- Bags have to be stored in lockers in a room separate from the reading room and vault
- A record is kept of materials consulted or used in teaching sessions to ensure all materials are reshelved after the session
- Materials to be consulted/used in teaching in the reading room where a member of library staff will be on duty
- If material is to be used in another room it will be accompanied by library staff

Wilful and accidental damage:

- All users of material are given handling training and will consult material in the reading room which is supervised by library staff
- Personal belongings are held in lockers away from the reading room
- Users are allowed to use pencil only and no food or drink is allowed into the reading room
- Equipment such as supports, cushions and book snakes are used when items are being consulted or used in teaching sessions to ensure they are supported
- A programme of cleaning and boxing rare materials is in place with priorities identified with academic advice and with those materials which are being used in teaching sessions being prioritised
- If items are displayed they are held in secure, environmentally controlled display cases

Fire/Water Damage:

- The University Major Incident Plan includes information specific to the Special Collections materials including information that will be available to emergency services and University security team
- A Salvage plan is being developed
- Shelving will be clearly labelled to indicate the priority to remove material in an emergency using a traffic light system
- The vault is temperature and humidity controlled and monitored daily
- The environmental control system for the vault will operate an automatic alarm if temperature or humidity levels exceed set parameters
- A de-humidifier is available if required to assist in managing the humidity
- Special Collections has no water services. A localised dehumidifier is housed within a container that would collect any water that leaked
- Materials are shelved 15 cm above the floor to avoid damage if there was any water ingress
- In the case of an incident the University has a Priority User Service agreement with Harwell Document Restoration Services which provides 24 hour access for advice and support in emergency disaster recovery situations
- The emergency preparedness kit is held in the Open Access Room (behind lockers)
- Plastic sheeting is available to cover shelves to protect material on the shelves

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APPENDIX B – HARWELL RESTORATION DISASTER RECOVERY SUPPORT

Priority User Service ensures:
Fast, 24-hour response to a fire or flood incident
Minimise damage and deterioration through swift stabilisation
Reduce the overall cost of the incident
Rapid reinstatement and restoration of damaged objects
Benefits of being a Priority User include:
24/7 hotline access and advice line
Multiple buildings qualify under one umbrella retainer
Priority emergency site attendance for collections salvage
Free property damage scoping survey
Free freezer storage
Free crate hire
At least 25% discount on restoration services (drying, cleaning, and sanitisation)
Transportation and packing of damaged collections
Discounts on restoration rates
Priority access to Harwell's Technicians, Project Managers, vehicles and restoration facilities
Free review of your existing disaster plan
Discounts on Harwell's Collection Care Services

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APPENDIX C – DISASTER PREPAREDNESS KIT

Housed in the Special Collections Open Access Room (behind lockers)

Contents are:

Immediate disaster preparedness kit
Polythene (some precut to shelf size)
Absorbent water barricade
Absorbent strips
Absorbent cloths
Duct tape
Disposable camera
Mop and Bucket
Broom
Dustpan & Brush
Warning signs (Wet Floor, Do Not Enter, Staff Only)
Barricade tape (red/white)
Wind-up torch
3 Light Sticks
Rite in rain notepad
2 pencils
Permanent marker pen
Utility knife
Zipper bags A4
Tyvek waterproof labels
Nylon ties for labels
Heavy duty rubbish bags
Black and clear refuse sacks

Personal protective equipment*
Goggles (dust & liquid)
P3 disposable mask respirators x5
Tyvek suits (x2 XL, x1 L)
Poncho
Disposable Aprons x2
Tough Work Gloves Large
Nitrile gloves (x2 M, x2 L)
High Vis vest
Rubber Over Boots Large

* NB additional PPE such as hard hats & protective footwear will be purchased on an ad hoc basis.
Additional equipment is available through Estates:

Generators
Sandbags
Emergency lighting
Dehumidifiers (one currently operational in the vault)
Fans/Air-movers
Submersible Pumps
Wet vacs
Folding tables
Trolleys, sack barrows
Crates (also provided by Harwell for freezer storage)

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APPENDIX D – SALVAGE EQUIPMENT KIT

Housed in the Special Collections Open Access Room (behind lockers)

Air-drying and handling equipment

Documentation kit (pens, clipboards, paper, labels, pencils, scissors)
Micro-fibre PEL cloths (x2)
Nylon cord for drying lines (x2)
Stainless steel paperclips
Dust masks for fine fibres (pack 20)
Nitrile powder free gloves (M)
Paper cleaning pads (x2)
Disposable aprons (x10)
Disposable overshoes (pack 36cm)
Unbleached cotton tape

Materials	Used for	Sizing
Melinex archival boxing	supporting fragile items in moving from damaged area	n/a
Newsprint paper	absorbent material ideal for mopping up spills and for drawing water away from saturated documents	Pre-cut large sheets On a roll (stored separately)
Silicone coated paper for interleaving	Interleaving bookplates, illustrations, illuminations	Pre-cut A4 & A5 On a roll (stored separately)
Evolon microfilament	cleaning, drying, blotting, humidification, support, interleaving	250mm x150mm pre-cut sheets
Reemay	Interleaving, water absorption	Pre-cut A5 On a roll (stored separately)

Printed forms including Entry register (appendix P), Incident Log (appendix H) and Damage Record Form (appendix G).
Pen-drive with copy of Special Collections Emergency Response & Salvage Plan and Staff Training Presentation.

A3 laminated copy of Object Specific Guidance (appendix D)
List of contents (laminated).

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APPENDIX E - Object Specific Guidance Table

Material	Salvage / movement	If treating onsite	If large quantity
Archive boxes	Support base of box, slide off shelf. Check whether contents wet beyond base item. If YES treat objects as detailed to right. If NO, overturn contents if possible and rebox (to expose bottommost item and allow to air-dry), transfer original label and monitor for 24 hours. Freeze if still wet after 24 hours.	Remove contents from the box and treat as per format. Keep box contents fastidiously in order.	If you have reboxed already, no need to crate unless new box weakened. If in original box, transfer to a plastic crate and transfer to freezers if objects can be frozen
Books – modern printed	Push from shelf, don't pull. If spines / boards / title plates detaching, place all in a polythene bag. Isolate with polythene bags any volumes with leaching dyes. Pack flat in crates, larger items at bottom for transfer. Do not open / close unnecessarily – transfer open books as found to assessment area. Do not overpack crates as crates will be too heavy to lift and the weight on the bottommost books will be too severe.	On blotting paper base, place books upright, fanned open to 60°. If wet inside, interleave with blotter or newsprint at the endpapers and within the text block (no more than 4 sheets per inch of text block to avoid distortion). Air-dry in wind-tunnel or on blotter on the floor / tops of tables. Remember to keep moving the book on the base of blotter so water will continue to desorb. Remove any dust-jackets. Keep area cool. WIND TUNNEL SUITABLE.	No need to interleave in text block with blotter. Place any volumes with weak boards / spine / leaching dyes into polythene bags. For all other volumes this is not necessary but an option if time permits (i.e. whole operation can be completed within 72hours of the initial wetting).. Consult with conservator for fine bindings
Books with coated papers and photograph albums	As modern printed above, but pack books upright in crate for transfer and **prioritise for treatment. Danger of pages sticking together.**	Stand volumes on blotter, but do not use blotter or newsprint to interleave. Carefully separate out each wet page to prevent adhesion. Interleave with silicone paper if necessary to prevent pages touching on each page. **NB this is very time-consuming.** Consult HDRS / Conservator as to whether attempts should be made to separate pages which have already stuck. NOT WIND TUNNEL SUITABLE.	Freeze as quickly as possible, packing vertically in crates. Ensure that it is made clear to HDRS that these volumes are coated.
Books - Large format bound newspapers	Keep flat and move horizontally, on boards if too large for crates	Dry flat, interleaving 20% of the text block, changing the blotter frequently. **If saturated, this is not likely to be successful, so freeze. NOT WIND TUNNEL SUITABLE**	Keep flat if possible and shrink-wrap onto boards for security, or stack vertically.
Compact discs DVDs and records	Pack vertically in crates in sleeves. Take care not to scratch surfaces.	Air-dry on blotter, or on lines (tape through CD central hole), separating CD from enclosures, case, but keep material together. If dirty, rinse disc with distilled water but do not rub as this may scratch. WIND TUNNEL SUITABLE.	Enclosures and case can be frozen and dried – CDs cannot. Try to rig up a rack and dry CDs vertically. DO NOT FREEZE AV material.
Framed artwork (glass)	Prioritise for treatment. Remove from fixings. Hold item upright and with one hand in the centre of the bottom frame member and the other between half and two thirds of the way up the side member. Larger items should be lifted by two people, supporting base and side of frame (never handle from the top). Transport vertically, in crates if necessary, never image to image, always image to back, and separated if possible with bubble wrap (bubbles towards back board, not the image). Line base of crate with bubble wrap (bubbles down).	Remove from frames unless artwork is stuck to glass (in which case, dry image side down, backing paper removed and consult a conservator) Do not separate from stretcher. If glass is broken and removable, remove it, but if cracked, try to tape over the breaks as glass may damage image, then lay face down. NOT WIND TUNNEL SUITABLE.	Prints can usually be frozen, but best to deframe unless the quantity in the 1000s where deframing may be very time-consuming. Always consult with a conservator when large quantities of paintings affected.
Framed artwork (no glass)	As glazed artwork above. **NB Large items may be better dried in situ rather than be moved too far.** Collect loose fragments of paint .	Remove frames but keep on any stretchers. Face up, air-dry on blotter. Avoid sunlight. Do not touch the surface of the painting. Keep horizontal. Collect any flaking paint. NOT WIND TUNNEL SUITABLE.	Air-drying only option – consult with conservator
Microfiche	Remove microfiche by taking drawers from the cabinet, rather than individual sheets.	Remove from sleeves but retain sleeve for the transfer of info. Either lay flat or clip to line with rust-proof clips. Keep fiche wet that you are intending to air-dry but can't get to within 4 hours. WIND TUNNEL SUITABLE	Freeze in drawers or transfer to shallow crates, vertically, keeping just one layer.

Microfilm reels and film	Check whether contents of box are dry by opening box, wiping outside first with paper towels to prevent ingress when opening. If dry, separate box from film but keep together. If wet, tie carton up and transfer to crates full of water.	Do not attempt to treat onsite. Whilst it is technically feasible, as the tape requires washing, this should be done professionally. WIND TUNNEL SUITABLE.	Contact a microfilm lab or film processor to rewash. Keep wet in the meantime, preferably in crates or bags of water but if not possible, self seal bags with air excluded.
Paper - uncoated paper	Individual sheets should be lifted from surface using melinex to lift (rather than fingers). Paper is very weak and can tear. Prioritise records with water-soluble inks for treatment.	Lay flat on blotter, transferring with melinex if necessary. Turn documents regularly to encourage drying on both sides, unless water-soluble ink which should be kept face up at all times. If space restricted, create layers: blotter-records – blotter – records – blotter (like a triple decker sandwich). Keep changing blotter. NOT WIND TUNNEL SUITABLE AS CANNOT BENEFIT.	Place into crates. Packed flat. No need to interleave unless in folders with leaching dyes.
Photographs	HIGH PRIORITY – ambrotypes, daguerreotypes, tintypes, silver gelatine glass plate negatives, wet collodion glass plate negatives, cyanotypes MEDIUM colour prints and film, silver gelatine prints and negatives, MEDIUM – LOW priority albumen prints and salted paper prints. Transfer in existing enclosures and boxes, do not touch emulsion	Remove from enclosures (usually best to cut away sleeve). Don't touch or blot surfaces. Air-dry in dust-free environment image side up or hang, clipping non-image areas. If you are aiming to air-dry, keep wet prior to treatment in crates of water to prevent adhesions (not glass plate negatives). If dirty, place in shallow tray full of distilled water and agitate for 15 minutes black and white / 10 minutes colour, then remove and air-dry. If advised by a conservator, attempt to separate adhered photos under water. For negatives only, if particulates are on the surface, you can gently brush the surface under water. WIND TUNNEL SUITABLE	Freeze if quantity is large for specialist drying, but NOT glass plate negatives which must be air-dried.
Vellum and parchment documents, manuscript	Transfer to drying area in existing enclosures and bring to the immediate attention of the Conservator. Support any pendant seals.	Area should be kept as cool as possible and drying should be controlled so that item retains its shape. On blotter, lay flat, face up. Edges should be weighted, & tension checked every 15 minutes by a Conservator. Item can be covered with blotter /release / bondina if there is no risk of ink-migration. Once the item is almost dry, weights can be removed, items placed between blotters and weighted overall to complete drying. It is not advisable to create 'stacks' of parchment for drying (unlike modern papers). NOT WIND TUNNEL SUITABLE.	Freeze if necessary (although not illuminated manuscript as the gilding may lift). Freeze-vacuum drying is possible but batch thawing and air-drying will be the preferable method (although the restoration time is likely to be longer).
Video and audio cassettes	Check if casings have kept tape clean and dry. If dry tape but wet box, separate but keep together and air-dry enclosure. If wet, keep vertical without separating & transfer.	Rinse tapes in distilled water still wound, then air-dry by supporting reels vertically or laying on sheets of clean blotter, taking care to keep material together. NOT WIND TUNNEL SUITABLE.	Transfer to Your emergency salvage contractor without freezing but with immediate authorisation for treatment. Bag if possible.

Items shaded in grey must **NOT** be frozen.

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APPENDIX F – HEALTH AND SAFETY

General points

It is important that health and safety is the highest priority in a salvage situation. The aftermath of a fire or flood will be potentially hazardous and it is the responsibility of the Damage Manager and Security to ensure that steps are taken to control the risk of anyone being injured in the course of the work.

In the event of an emergency, the Fire Brigade will be available to advise and you will not be permitted in the building if it is structurally unsound. If their presence has not been necessary, advice can be obtained from Estates. The Risk Assessment form on the next page should be completed before salvage begins. This will prompt you to look for hazards so that the appropriate precautions can be taken.

Key steps will include:

- Ensuring there is no risk from live electricity and water – power should be off until a qualified person can check supply
- Clearance of standing water, and slip and trip hazards from muddy floors, plus clearance of debris such as glass and twisted metal
- Provision of suitable personal protective equipment and clothing. Provision of adequate rest facilities and a first aid point. Provision of drinking water if your own utilities are off /contaminated (1 gallon per person per day)
- Constant monitoring for signs of mould growth and the issue of suitable respirators
- Use of equipment to help with manual handling and briefing staff on do's and don'ts (lift from knees, not back etc.)
- Provision of adequate lighting. NN generators should not be operated in a confined space
- No use of lift until advised otherwise after appropriate engineer inspection
- Site control and register. Review of procedures daily at least to meet changing needs
- Hazardous substances (arrowheads, taxidermy) awareness. Possible pests in flooded areas (rats)
- Briefing of staff before they enter site to advise on areas where they can and cannot go
- Regular breaks for staff to avoid tiredness and accidents.

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APPENDIX G - RISK ASSESSMENT FORM

Area of work and activity	Person responsible for risk assessment	Date of issue Review date

Reason for this risk assessment (delete) Salvage after fire / water-damage / explosion / mould outbreak / other	Hazard severity 5 Very high 4 High 3 Moderate 2 Slight 1 Nil	Likelihood of occurrence 5 Very likely 4 Likely 3 Quite possible 2 Possible 1 Unlikely
Individuals at risk (e.g. staff, volunteers, contractors)	e.g. 4 x 5 = 20	e.g. 16-25 High 9-15 Medium 1-8 Low

Injury	Severity	Likelihood	Score	Working conditions	Comments How it impacts on hazard.
Falling (e.g. person from height)				Lone working	
Falling (e.g. debris)				Space (confined)	
Slipping				Height	
Tripping				Visibility	
Cutting				Adverse weather conditions	
Manual Handling				Heat / cold	
Burning / scalding				Structural integrity	
Hazardous objects (taxidermy)				Utilities / lift affected	
Electrocution				Stress / trauma	
Biohazard (sewage / mould)				Other	
Fumes / airborne contaminants				Other	
Trapping/crushing				Hazard severity x likelihood of occurrence= Risk Factor (use highest individual score) _____ x _____ = _____ Hazard severity Likelihood of occurrence (risk factor)	
Contaminated water					
Other					

Description of hazards		
Control measures currently in place		
Persons at exceptional risk (e.g. asthmatic persons, pregnant staff) and specific recommendations		
Control measures required		Date completed
Further surveillance required		
Reduced risk factor after corrective action		

Signed_____ Date_____ Contact no._____

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APPENDIX H – DAMAGE RECORD FORM

Each crate should be given a number and this form completed for each crate detailing its contents. Upon completion, this form should be given to the Salvage Operations Coordinator. In the event of a major emergency, the form can be used as a summary sheet, detailing just the crate number under 'Item Ref No' and a broad summary of contents. Only do this if permitted by the Collections Salvage Manager.

Crate number _____ Original location _____

Item Ref No	Object description	Type of damage	Treatment needed	Moved to (location)

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APPENDIX I – ENTRY REGISTER

NAME	LOCATION	IN	OUT

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APPENDIX J – INCIDENT LOG

Date	Time	Person responsible	Notes