Controlling the Situation

Controlling the situation before starting salvage will be safer and limit the overall damage.

- Clear affected areas of staff / visitors and restrict access
- Implement your emergency plan and contact key staff including facilities personnel
- Identify source of any leak and control (e.g. turn off stop cock)
- Isolate electricity and risk assess affected areas for salvage work to start
- Check building for other areas of ingress
- Protect unaffected collections at risk with polythene
- Photograph scene

Health and Safety

However important your collections, people's safety comes first.

- Risk assess the salvage process before starting work
- Clear surface water (is the water foul? If so damaged items may require sanitisation)
- Provide appropriate personal protective equipment
- Clear the floor as much as possible
- Provide lighting
- Mouldy material is hazardous to health and should not be air dried without engineering controls and appropriate PPE

Water Damage

When items are wet a prompt response (within 2-3 days) is necessary to minimise secondary damage (e.g. mould growth, distortion).

Identify a secure, dry area to move items to for assessment.

- Clear objects on floor first
- Lift objects from lowest load-bearing member
- Push boxes / books from shelf from behind
- Minimise direct handling
- Use crates, existing drawers, support boards, trolleys, straps and Melinex to move items, rather than carry in hands, wherever possible
- Pack items flat, heavier and larger items at the bottom
- Keep paintings and books with coated papers vertical
- Isolate into polythene bags anything which is leaching dye or disintegrating
- Implement a documentation system so that you can track items

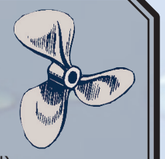
In the assessment area, separate out the dry items and classify the remaining as:

- Damp/Wet – to be air dried (or frozen if resources are not available)
- Soaking Wet – to be stabilised (frozen / kept wet)
- Requires professional assessment (e.g. significant staining, soiling)

Stabilisation by Freezing

- All items can be air dried; however lack of resources may restrict how much can be treated in 2-3 days.
- Stabilisation (freezing to -18C) can be used to prevent rapid deterioration and mould growth on textiles, paper, books, parchment and some other items with a conservator's advice.
- Some items should not be frozen, including paintings and ceramics. In a mixed collection, it may be prudent to maximise space available for these items by freezing textiles and paper.
- After freezing, items can be dried using vacuum-drying techniques or defrosted and air dried in manageable batches in the future.

Air Drying



Objects should be air dried through evaporation only, with no application of heat. There are three possible speeds:

- Fast (using a wind-tunnel - see overleaf) for 3D / non-porous items
- Medium (using fans and a dehumidifier within a room, but not targeted) for 2D / porous items
- Slow (using a dehumidifier with careful control) for buildings / furniture

To maximise the drying speed:

- Increase the surface area (e.g. fan books, place items on blocks)
- Interleave with newsprint or other thin absorbent paper
- Pad out with paper towels to preserve shape (e.g basketry)
- Place wet items on blotters and keep changing blotter / position
- Cut items out of sleeves / de-frame items to allow trapped moisture to dry
- Items stuck together can usually be separated. Consult a conservator for advice
- Don't rub; pat items dry unless the surface is loose or decorated
- Do not touch / place blotter on decorative surfaces / emulsion side (dry face up)
- Keep area cool
- Dry most items flat (except bound items)

Check level of water penetration for boxed items – simple re-boxing of these items (including turning contents upside down) may be sufficient to stabilise these items.

Fire Damage

- Anything which is wet and smoke-damaged must be dried prior to smoke being removed.
- Items which are burnt or scorched may be very difficult to repair, but consult a conservator.
- Smoke residues can be cleaned using conservation smoke sponges or latex sponges.
  - Prioritise metals, plastics and electrical equipment as these are not stable – smoke causes corrosion / discolouration
  - Other items can be deferred for treatment unless they are wet, in which case they should be prioritised
- Damage will be worst to items on display, those closest to the seat of fire and broken windows.
  - Items in cabinets, racking, boxes may only have suffered minor smoke damage

2 Photographic

- Pack material vertically for transfer to the drying area
- Remove items from frames unless stuck to glass and dry in frame face down
- Dry face up on blotter or hanging on a line with plastic clips
- If image is only partially wet, rewetting the whole image may produce a better result

To dry:

- Cut from sleeves; don't pull
- Do not touch image
- Dry face up or hanging on a line with brass / plastic clips or soft grip pegs
- Keep area cool and dust free

3 Wood

- Keep drawers in place in furniture
- Hold veneers in place with weights
- Lift from lowest load-bearing member, planning route carefully

To dry:

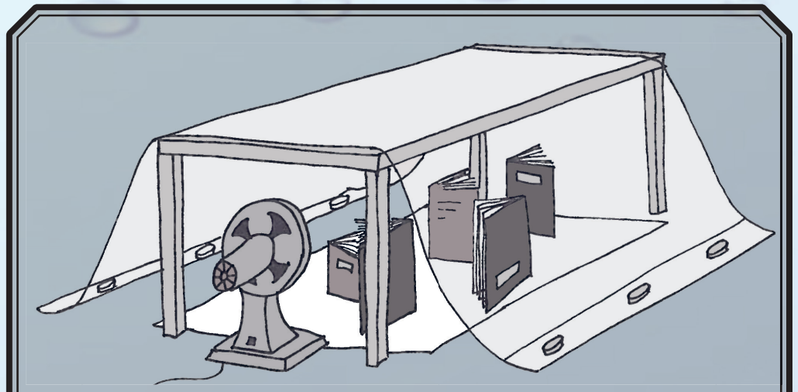
- Dry slowly using carefully controlled dehumidifiers to reduce risk of cracking/ splitting

2 Natural History

- Avoid jolting movements when handling
- Do not pack cased specimens on top of one another
- Keep items in existing containers and dab out excess moisture
- Beware of hazardous substances on taxidermy and minerals (i.e. asbestos)

To dry:

- Open boxes to increase ventilation



1 Metal

- Wear gloves

To dry:

- Blot with paper towels
- Air dry and don't cover with plastic as this encourages corrosion
- Refer to a specialist horologist for clocks

2 Sculpture & Plasterwork

- Do not handle by protruding parts

To dry:

- Dry larger pieces in situ but off floor
- Pat surface dry
- Monitor for powdery deposits
- Beware of corrosion to iron fixings making piece unstable or weak

Mixed Media

Beware of conflicts between drying speeds of different materials. Dry at speed which will cause least damage or will be easiest to rectify.

Can be frozen

Drying Speed

1 **Fast** 2 **Medium** 3 **Slow**

2 Textiles

- Support item fully during transit using taut polythene or existing drawers
- Separate any items with bleeding dye with polythene
- Do not stack textiles on top of one another

To dry:

- Spread flat on polythene with towels / blotter on top and bottom and replace when saturated
- Press moisture out but do not wring
- Reshape whilst damp
- Don't unfold delicate wet fabrics whilst sodden

2 Loose Papers

- Lift individual documents from floor using Melinex
- Keep papers flat and put in crates to move
- Check boxed papers to verify water penetration. Remove, overturn, re-box and monitor if only bottom leaf wet

To dry:

- Do not separate sodden clumps - allow to dry a little then separate bundles
- Sandwich between blotter up to 10 levels high
- Keep water-soluble inks face up, with no blotter on them
- Freeze if large quantities

2 Paintings

- Drain water from image by tilting, collecting any paint fragments
- Move painting with enough people, using straps and keeping upright. Hold frame underneath avoiding ornate mouldings
- Stack vertically whilst awaiting treatment

To dry:

- De-frame (but keep canvas on stretcher) unless picture is stuck to glazing in which case seek advice
- Place on blocks to ensure air-flow over and under
- Consult a professional as soon as possible

1 2 Ceramic & Glass

- High risk of breakage and surface damage
- If broken, collect all fragments in bubble-lined bags
- For high-fired ceramics wash debris away from cracks

To dry:

- Pat dry
- Watch out for old glue repairs becoming weak in water
- Dry high-fired ceramics fast and low-fired ceramics at medium speed

1 2 Bound Materials

- Push from shelf, don't pull
- Isolate if disintegrating / dyes leaching
- Pack flat for removal

To dry:

- Fan open to 60 degree angle, interleaving at endpapers
- Don't force pages apart; if pages are clumped or too wet to dry then freeze
- Folios with thick text blocks may be unstable standing up; freeze and consult a professional conservator or conservation / restoration company

2 Leather

- Support items fully from underneath

To dry:

- Pad to maintain shape and air dry with fans on blotter
- Leather can be frozen if in large quantities, but only to -5C