

## Drying Wet Collections & Buildings

Drying wet collections and buildings as quickly as possible is crucial in controlling mold and pest infiltration, as well as other damages. Take the best possible actions, balancing post-disaster conditions, available resources, and identified collection priorities. When possible, work with conservators.

### Wear Personal Protective Equipment

Personal Protective Equipment (PPE) is very important when handling wet, contaminated collections. Wear PPE at all times. Use N95 or P100 disposable masks or re-usable respirators with HEPA filters. Wear latex or nitrile gloves, replacing them regularly. Goggles without vent holes are recommended and should be regularly cleaned with alcohol. Wear hair covering. Clothes or Tyvek suits and booties should be removed when leaving the contaminated site. Tyvek suits should be discarded, and clothes should be washed in hot water.

### Assess the Situation

Assess the situation to determine:

- The extent and locations of wet collections or historic building spaces
- The priority order in which collections, rooms and the building should be dried
- Staff capabilities, availability and number of staff, level of training, etc.
- Available resources, including work and storage areas (internal or off-site), security, electricity and water, equipment and supplies, vendors, and funding

### Create a Plan

Create a plan to address the situation, modifying it as circumstances change:

- Be aware that needs may be conflicting and multiple recovery actions must be synchronized by a designated team leader
- Dry the building and collections as quickly and safely as possible
- Set reasonable goals and timelines, balancing needed work with regular daily functions
- Check the building and collections regularly for developing problems
- Monitor and document the evolving situation, including changes in collections' conditions and location
- Monitor interior and exterior temperature, humidity, and weather forecasts
- Provide security to protect open buildings and vulnerable collections
- Use caution in hazardous site conditions and when handling hazardous materials, such as natural history, science, and military collections

## Dry the Building

Dry the building quickly, but in a controlled manner:

- Without electricity, increase and control airflow, to regulate the rate of drying and lowering the potential for mold. Open and close windows, vents, and doors to optimize airflow and light exposure.
- With electricity, strategically place as many dehumidifiers and fans as available, periodically changing their locations to ensure drying throughout the building
- Consider using vendors, who can provide large equipment, generators, and personnel

## Dry the Collections

Dry the collections quickly, but in a controlled manner:

- Remove collections from wet areas
- Separate unaffected from affected collection items
- Set up work areas to dry, clean, and house collections
  - Working outside the building may be best if humid, wet or moldy conditions exist inside
  - Working indoors may be best for collections control and security or in bad weather
- Control airflow and monitor collections to regulate the rate of drying. There is no risk of over drying, but mold growth remains a risk
- Avoid creating secondary damages, (ex. rust or mold growth, media bleed, separation or loss of collection components and/or identifying information)
- Spread out collections to dry, allowing ample air circulation. Use fans to circulate air around, but not directly on, collections
- Handle collections carefully, as structures and media may be more vulnerable while wet
- Use carrying supports and prepare “landing” surfaces, using products such as plastic sheeting, tarps, window screening, clean fabric, etc.
- Use absorbent materials such as paper towel, blotter, clean fabric, etc. to hasten drying. Absorbent materials may be reused if dried and kept clean.
- Avoid stacking
- Arrange “flat” collections items (ex. paintings, works on paper) with media side up
- Unframe paper-based items, if possible
- Stand structurally sound books upright, fanning pages open. Place absorbent interleaving paper between groups of pages. Do not overfill, which stresses the binding with added thickness. Change interleaving often
- Hang structurally stable collections (ex., photographic negatives, slides, small pamphlets, etc.) from clothesline, using plastic paper clips, binder clips, or plastic clothespins
- Pad and support three-dimensional collections' shape (ex. textile, basket, leather) using absorbent materials. Some items, (ex. furniture, sculpture) may require clamping or bracing



## Important Considerations

- *Make sure everything is completely dry before boxing.*
- *Collections will often require further treatment after drying.*
- *Monitor all collections regularly as they remain vulnerable, even after drying.*
- *Most commercial products (ex., Lysol, Thymol, or bleach) are ineffective long-term and can cause permanent damage.*

## Resources

American Institute for Conservation (AIC):

AIC Disaster Response and Recovery: <http://www.conservation-us.org/resources/disaster-response-recovery>

Health and Safety Wiki [http://www.conservation-wiki.com/wiki/Health %26 Safety](http://www.conservation-wiki.com/wiki/Health_%26_Safety)

Mold Segment: (Video) <https://www.youtube.com/watch?v=Yq-lUdpnlul>

National Park Service: NPS Primer for Disaster/Mold

<https://www.nps.gov/museum/publications/primer/primintro.html>

Salvage at a Glance, Betty Walsh,

<http://cool.conservation-us.org/waac/wn/wn19/wn19-2/wn19-207.html>

NEDCC Emergency Salvage of Wet Books and Records

<https://www.nedcc.org/free-resources/preservation-leaflets/3.-emergency-management/3.6-emergency-salvage-of-wet-books-and-records>

*Collecting institutions affected by an emergency event should contact the National Heritage Responders for additional response advice: 202.661.8068 or [nhr@conservation-us.org](mailto:nhr@conservation-us.org)*