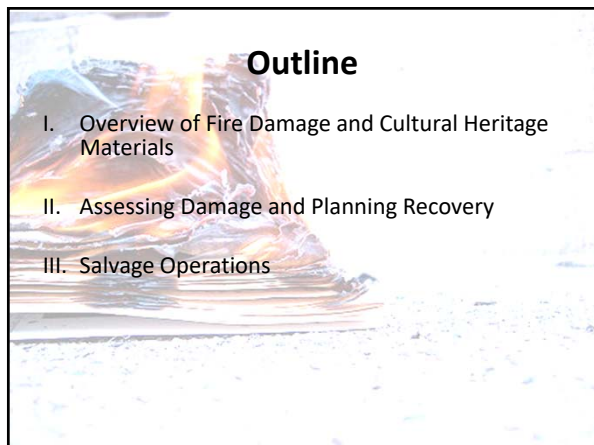


Fire Response & Salvage of Cultural Heritage Materials

**CARLI & The Illinois Fire Service Institute
Burn Simulation & Recovery**

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Outline

- I. Overview of Fire Damage and Cultural Heritage Materials
- II. Assessing Damage and Planning Recovery
- III. Salvage Operations



Fires in Cultural Heritage Institutions



Bette Davis in Storm Center, 1936, LIFE Photograph Archives

Fires in Cultural Heritage Institutions



Triana Public Library Fire photos (2009)
<http://www.flickr.com/photos/hmcp/sets/7215762301604023/>

Connecticut River Museum Video (2009)
<http://www.wfmh.com/dpp/news/connecticut/trying-to-asses-the-damage#.UYE5XsrPLng>

Assessing Damage & Planning for Recovery

Primary Concern After a Fire:

- Human Safety
- Continuity of Operations (COOP)
- Recovery


Risks Greatly Decreased by Proper Disaster Preparedness:

- D-Plan and other disaster planning
- Preexisting contracts with disaster recovery firms
- Understanding emergency response protocols - ICS

Assessing Damage & Planning for Recovery

First Recovery Steps After a Fire:

- Identify and stabilize structural hazards
- Reduce temperature and RH to <70 degrees and 45% RH, if possible
- Remove
 - Standing water and empty items containing water
 - Wet carpet
 - Wet furnishings
- If everything is soaked, secure commercial dehumidification services ASAP



Assessing Damage & Planning for Recovery

Assess Condition of Collections:

- Before Salvage
 - Maintain items in the conditions found
 - Protect materials at risk with loose plastic sheeting
- Undamaged Items
 - Leave in place if environment/building is stable
 - Move only if environment/building is threatening
- Check for mold daily – Fire and smoke damage has already occurred, but risk of mold damage can be minimized

Assessing Damage & Planning for Recovery

What are your salvage priorities?

- Established prior to disaster, ideally
- What type of materials are damaged?
 - Loan materials
 - High risk materials – iron, skins/leathers/parchment, coated paper, textiles
 - Widely held versus unique
 - What is your institution known for?
 - What do you need to keep the doors open?
 - Don't forget business records, personnel files, etc.

Assessing Damage & Planning for Recovery

What are your salvage priorities? (con't)

- What type of damage have materials sustained?
 - Water, but not fire
 - Fire, but not water
 - Water and fire damaged
 - Submerged in water, very wet, barely damp?
- Mold is biggest threat after water damage
- Dry, fire damaged materials are reasonably stable, if environment is not a threat

Assessing Damage & Planning for Recovery

What type of recovery is appropriate?

- Immediate air drying
- Freeze then air dry
- Vendor provided drying options
- Smoke/Odor reduction
- Conservation/Repair
- Discard

Northeast Document Conservation Center (NEDCC)
 Leaflet: *Emergency Salvage of Wet Books and Records*
<http://www.nedcc.org/free-resources/preservation-leaflets/3-emergency-management/3.6-emergency-salvage-of-wet-books-and-records>

Assessing Damage & Planning for Recovery

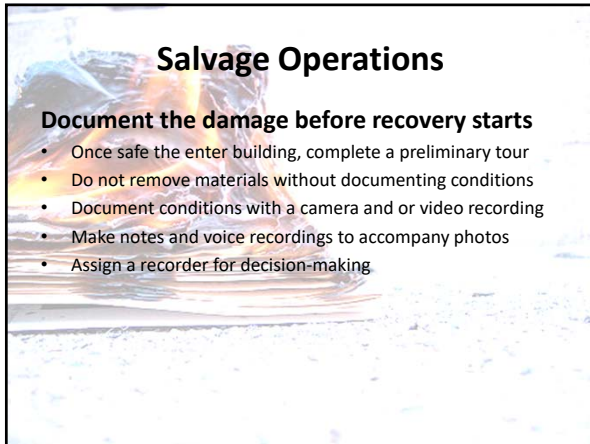
(Larger) Disaster Recovery Vendors

- Blackmon Mooring Steamatic Catastrophe – BMS CAT
<http://www.bmscat.com/>
- Belfor <http://www.belfor.com/>
- Midwest Freeze Dry <http://www.midwestfreezedry.com/>

Salvage Operations

Organize your disaster recovery team

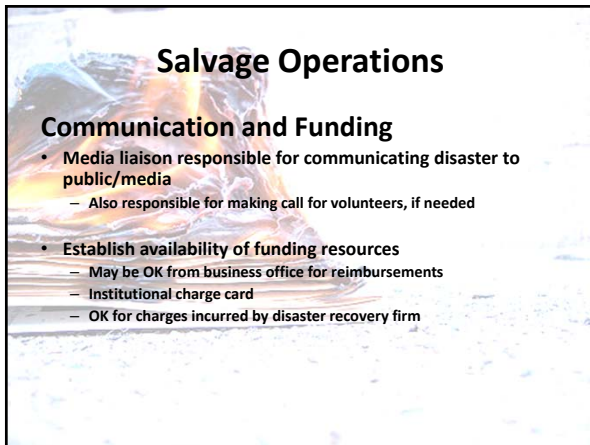
- **Should already be outlined in a disaster plan**
 - Disaster Recovery Officer (leader of Disaster Team)
 - Recovery Specialist (leader of Recovery Team)
 - Recorder/Photographer
 - Campus and Public Relations Liaison
 - Logistics and Facilities Coordinator
 - Administrative Services Coordinator
 - Collections Representative
 - Pack-Out/Relocation Supervisors
 - Systems Recovery Officer
- **Establish command post and communication methods for the team**



Salvage Operations

Document the damage before recovery starts

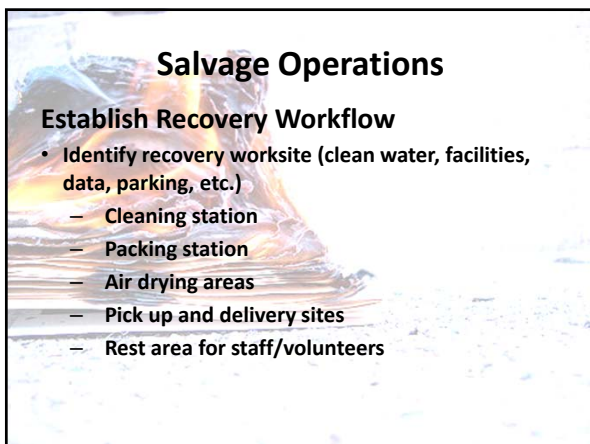
- Once safe the enter building, complete a preliminary tour
- Do not remove materials without documenting conditions
- Document conditions with a camera and or video recording
- Make notes and voice recordings to accompany photos
- Assign a recorder for decision-making



Salvage Operations

Communication and Funding

- **Media liaison responsible for communicating disaster to public/media**
 - Also responsible for making call for volunteers, if needed
- **Establish availability of funding resources**
 - May be OK from business office for reimbursements
 - Institutional charge card
 - OK for charges incurred by disaster recovery firm



Salvage Operations

Establish Recovery Workflow

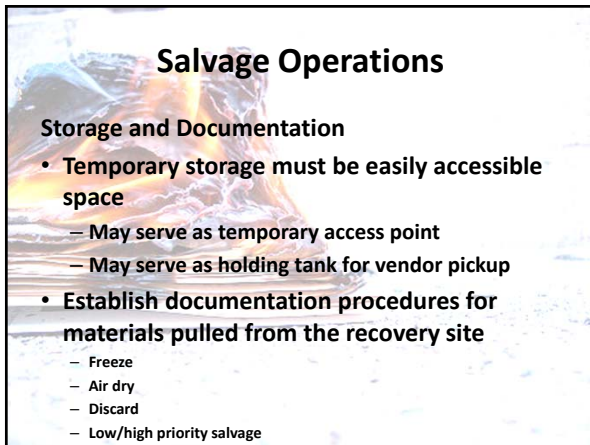
- **Identify recovery worksite (clean water, facilities, data, parking, etc.)**
 - Cleaning station
 - Packing station
 - Air drying areas
 - Pick up and delivery sites
 - Rest area for staff/volunteers



Salvage Operations

Set up Transportation Plan

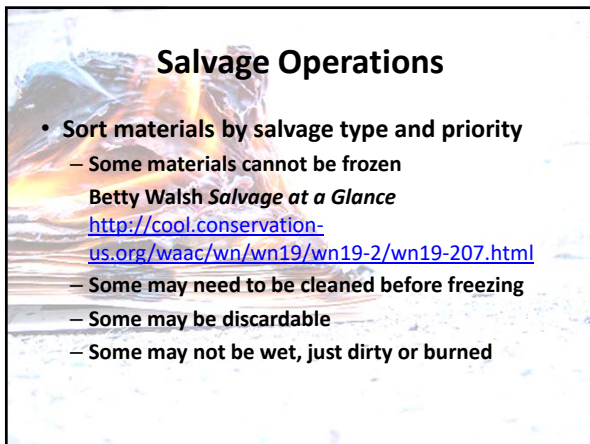
- **Need to move books in an organized fashion from shelf to recovery site**
 - Book trucks
 - Bucket brigade
 - Boxes/crates
 - Van or truck



Salvage Operations

Storage and Documentation

- **Temporary storage must be easily accessible space**
 - May serve as temporary access point
 - May serve as holding tank for vendor pickup
- **Establish documentation procedures for materials pulled from the recovery site**
 - Freeze
 - Air dry
 - Discard
 - Low/high priority salvage



Salvage Operations

- **Sort materials by salvage type and priority**
 - Some materials cannot be frozen
 - Betty Walsh *Salvage at a Glance*
 - <http://cool.conservation-us.org/waac/wn/wn19/wn19-2/wn19-207.html>
 - Some may need to be cleaned before freezing
 - Some may be discardable
 - Some may not be wet, just dirty or burned

Salvage Operations

Air Drying Library Materials

Set up in cool, dry space with good air circulation and fans

See Cornell University Library's excellent guidelines for recovery at:
<https://www.library.cornell.edu/preservation/librarypreservation/mee/management/gettingstarted.html>



Salvage Operations

Cleaning & Packing for Freezing

- 1) Clean books in clean water, only if necessary. Squeeze out any excess water.
- 2) Wrap wet books in waxed paper or freezer paper to separate, if possible.
- 3) Place books in box or crate for shipping. Label and document contents of each container.

