

Library Emergency Preparedness Plan

Name of Organization: Library

Address:

Phone: (circulation desk)

Date of Plan Completion: 5/30/2012

Next Scheduled Update: 5/30/2013

Distribution: Library Director
Head of Public Services
Head of Technical Services
Library Associate for Public Services
Security

Introduction:

The main purpose of developing this plan was to produce a manual that will serve as a reference tool in an emergency. The manual presents brief immediate emergency procedures, expanded basic information procedures, how to handle damaged library materials and provides a list of experts, suppliers, and service companies in the Southwest Florida area. Major resources from other parts of North America are included as well.

The areas of highest concern are:

1. Archives (key card needed)
2. Rare books (key card needed)
3. High Value Sets
4. Folios (Reference area)

This document should be reviewed annually by the Library staff or a committee appointed by the Director.

BRIEF EMERGENCY INSTRUCTIONS (located at the circulation desk, on the second floor, preservation room, and on the top shelf of the book case closest to the door in the Director's office) (full response procedures start on p. 8 of complete document)

The first priority in any collection-threatening emergency is to preserve and protect human life. In applying the emergency instructions, focus on the safety of all persons in the building, and do only as much as is safe and prudent to protect the collections.

EMERGENCY NUMBER FOR FIRE, POLICE, PARAMEDICS: 911 then SECURITY

WHEN PLACING A 911 CALL, BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION LISTED BELOW:

- **NAME**
- **LOCATION**
- **TELEPHONE NUMBER FROM WHICH YOU ARE CALLING (FYI: Circulation desk)**
- **TYPE OF EMERGENCY**
- **STAY ON THE PHONE UNTIL THE OPERATOR SAYS TO HANG UP**

BUILDING EMERGENCY SYSTEMS

Fire alarm pull stations -- located on each floor at most stairwells and egress doors; also by 2nd floor back elevator, by the emergency door in the stairwell across from front elevator. In case of fire, or other emergency requiring building evacuation, activate the nearest pull station.

Fire extinguishers -- Each floor has wall mounted extinguishers.

Locations: 1st floor – back “staff only” door, entrance door to IT Dept., column in Reference, column in Q classification, vending area in 24 hour reading room.
2nd floor – column in BX4705, column in BR350, outside Music Dept., hallway to bound periodical room, back “staff only” door, Spec Col/RB room

These extinguishers are for self protection only. It is not advisable for any employee to try and fight a fire.

Fire alarm signal – loud sound when an alarm pull is activated or an emergency door is opened.

Sprinklers and smoke detectors – The building has sprinklers and smoke detectors. These detecting systems are automatically monitored, so that, if any one is activated by smoke or heat,

an alarm will sound. Security will be alerted, and the fire department is automatically notified, if appropriate.

Elevator – DO NOT USE ELEVATOR – USE STAIRS LOCATED IN THE FRONT (NORTH), CHAPEL SIDE (EAST), WEST (TOWARD ACADEMIC BUILDING) AND REAR (SOUTH) SIDES OF THE BUILDING

Phone – 1st floor: each work desk and circ/reference desk, on counter in Reference, table in north reference area, break room
2nd floor: AV room

Intercom – controlled by the IT Dept.

Area of refuge – For persons unable to use stairs, the designated temporary safety area is any of the stairwell areas on any floor.

Staff designated assembly area – on sidewalk between the library and academic building, halfway across the mall

Medical

1. Call 911 and give location and extent of problem then call Security
2. Meet emergency personnel at door and direct them to the injured person(s)
3. Urgent care in (location) (phone number) (M-T, H-F 9-5) Address:

Fire

1. If you see fire or smell smoke and the automatic alarm hasn't already been activated pull the nearest manual alarm – evacuate persons in the building.
2. Determine the location and source of the fire, if that can be done quickly and safely.
3. Call 911 then Security to report the fire.
4. Trying to extinguish a fire should only be done if it has already been reported and there is a clear and open escape route. **Do not jeopardize safety to accomplish this task.**
5. If fire is larger than 3-foot base, immediately evacuate the building and await arrival of fire authorities to inform them of the status. Detailed instructions and responsibilities are provided in Appendix I, Evacuation.
6. If possible and safe to do so, take the following other actions: close computer programs; take purse, building keys, backup zip disk, and copy of disaster plan.
7. From a safe location, notify the following staff of the event: Canizaro Library Director, Director (w), (c) or Head of Public Services (w), (c).

8. Follow detailed instructions located in the disaster plan, under Fire (full procedure), a copy of which is kept in the Director's office.

Water (full procedure on p. 8-9)

In routine emergencies, clean water may leak into collection areas. If there is any risk that the water is contaminated by sewage or other substances, responders should wear protective clothing (waterproof boots, clothing, gloves, glasses and mask). If there is any risk of electrocution, do not enter the area.

1. If easily done, attempt to determine the cause or source of the water.
2. Contact Security to determine action.
3. Contact, in the following order, and give exact location of the problem: Canizaro Library Director, Director (w), (c) or Head of Public Services, (w), (c).
4. If collection materials are threatened by water, immediately notify the Canizaro Library Director, Director (w), (c) or Head of Public Services, (w), (c).

If neither is available, call in the following order:

Head of Technical Services (c)
Library Associate for Public Services (c)
Student assistants

5. Protect the collections while awaiting assistance. Choose (a), (b), or (c), depending on the situation:
 - a. If only a few items are in jeopardy and the water flow is minor, move any wet or vulnerable materials to a dry, secure location nearby.
 - b. If water is coming from above, get plastic sheeting located in room (Master key needed for entry) and use it to cover affected areas, stack ranges, cabinets, shelves, etc.
 - c. If water is coming in on the floor, get book trucks or dollies located in Circulation and room and remove materials from affected area, beginning with those in lower drawers/shelves, and move them to a safe location that will not be subject to flooding.
6. Follow detailed instructions located in the disaster plan, a copy of which is kept in the Director's office (above desk).

Utilities/Systems Malfunctions

1. In the event of an emergency related to utilities (gas, electricity, water, etc.) or systems (HVAC, etc.) during regular business hours, contact the following:

Security and IT Dept.

Power Failure

1. Contact: Security
2. Retrieve flashlight located in cabinet in workroom or Circ Dept. cabinet
3. Turn off all electrical office machines/appliances

Tornado

1. Evacuate staff and visitors to any area away from windows and doors
2. Remain in sheltered areas until an “ALL CLEAR” has been given through the announcement system.

Earthquake (full procedure on p. 11-12)

1. If you are in bookstack aisles or near file cabinets, move away from them.
2. Take shelter in a doorway, under a sturdy desk or table, or in another well-protected area.
3. Be prepared for after-shocks.
4. Follow detailed instructions located in the disaster plan, a copy of which is kept on the shelf above the Director’s computer.

Chemical/Hazardous Material Release (outside)

A hazardous material release is defined as any leak or spill in the area which poses a danger to personnel if they are exposed to the material.

1. Call 911 then Security (if not already reported)
2. Air supply from outside to inside building should be shut down (IT Dept.)
3. Close all windows and doors
4. Stay in the building until cleared by proper authorities
5. Do not use phone except for emergency
6. Remain calm

Bomb Threat

1. Keep the caller on the telephone if possible and gather information noted on the Bomb Threat Report Form located in Appendix C of the disaster plan. Things to remember about call:

Time call received/terminated.

Exact words of caller.

ASK: what time the bomb is set to explode.

Where is it located?

What kind of bomb.

Description of voice: male, female, calm, nervous, young, old Unusual phrases. Do you recognize voice.

Any background noise.

2. Immediately call 911 then Security

3. **DO NOT** touch or move any suspicious objects.

4. **DO NOT** react in a manner that may cause undue alarm and possible panic.

5. Evacuate building. See instructions under Evacuation (Appendix I).

Civil Disturbance or Riot

Any disturbance inside or outside the building during normal working hours, shall be reported.

1. Immediately notify: 911 then Security

2. Take the following steps to safeguard people in the building: avoid the area of disturbance, avoid windows and lock doors.

Designated Assembly Area

Upon evacuating the building using the stairs, assemble on sidewalk between the library and academic building, halfway across the mall.

Emergency Numbers

Library Director (w), (c)

Designated alternative, Head of Public Services (w), (c)

Ambulance 911

Computer maintenance: IT Dept

Conservator

Disaster Recovery Information <http://www.lyrasis.org/Preservation/Disaster-Resources.aspx>

Electric Co. Facilities Management

Electrician Facilities Management

Fire Department 911

Freeze drying Facilities Management
Gas Co. Security and Facilities Management
Hazardous Materials 911 then Security
HVAC Security, IT, Facilities Management
Insurance Company Administration/Emergency Team
Janitorial service Facilities Management
Library staff: Head of Technical Services (c)
Library Associate for Public Services (c)
Moving company Facilities Management
Paramedics 911 then Security
Photographer Administration
Plumber Facilities Management
Police 911
Roof Facilities Management
Security System Security
Student assistants

Telephone Co. IT Dept.
Urgent Care in (location) M-T, H-F (Phone) (Address)
Water/Sewer Security

FULL RESPONSE PROCEDURES

Water Damage (Routine)

The following procedures are for routine water damage from roof leaks, plumbing system malfunctions, minor flooding, and so on. For area flooding and other major water disasters, follow the instructions in "Response Procedures: Medium-to-Large Scale Disasters" (p. 12-25)

Judgment and experience may lead you to apply these instructions in a different order than listed here. For example, if a minor leak threatens only a single file cabinet, the prudent course may be to move the cabinet out of harm's way before initiating steps 2-6.

1. Attempt to determine the cause or source of the water. If you cannot determine the source, proceed to step 2 anyway.
2. Attempt to cut off water if feasible. The location of water shut-off valves and procedures for closing them are handled by Physical Plant.
3. Call, in the following order:

Facilities Management
Security
Library Director (w), (c)
Head of Public Services (w), (c).

4. If collection materials are threatened by water, immediately notify the Library Director (w), (c) or Head of Public Services (w), (c).

If neither is available, call in the following order:

Head of Technical Services (c)
Library Associate for Public Services (c)
Student assistants

5. Make sure electrical circuits in the affected area have all been turned off. No one should walk through water until the appropriate safety officer has declared the area safe.

6. If there is any danger of biological contaminants in the water, staff working in the area will wear disposable gloves and boots (glasses, masks, etc.) located in the disaster supply kit.

7. Pull the in-house disaster supply kit, located in the 1st floor library supply closet and 2nd floor conservation room

8. Protect the collections while awaiting assistance. Choose (a), (b), or (c), depending on the situation:

a. If only a few items are in jeopardy and the water flow is minor, move any wet or vulnerable materials to a dry, secure location nearby.

b. If water is coming from above, get plastic sheeting located on 1st floor library supply room or 2nd floor conservation room and use it to cover affected areas, stack ranges, cabinets, shelves, etc.

c. If water is coming in on the floor, get book trucks or dollies located at the elevator door on each floor and remove materials from affected area, beginning with those in lower drawers/shelves, and move them to a safe location that will not be subject to flooding.

9. Facilities will remove/have removed any standing water.

10. Take steps to reduce the temperature and humidity and to increase air circulation:

a. Measure the temperature and relative humidity using monitoring devices in the supply kit, RBR or 1st floor display case

b. Turn on air-conditioning or lower the temperature setting (IT).

c. Increase air circulation in the affected area by running fans continuously.

d. See other environmental control strategies outlined in Appendix D, Building Stabilization and Environmental Control (Emergency Team).

11. Initiate salvage procedures detailed in the "Salvage Procedures" section of the plan. If the quantity of damaged materials is less than 5 volumes or 3 file drawers, salvage will occur in-house. If more than we can accommodate, contact Moisture Control Service

Response Procedures: Severe Storms and Floods

1. When a severe storm is forecast, notify Library Director (w), (c) or Head of Public Services, Head of Public Services (w), (c).

If neither is available, call in the order listed below:

Head of Technical Services (c)
Library Associate for Public Services (c)
Student assistants

2. The Facilities will determine what level of response is warranted: trim overhanging trees, remove unanchored outdoor materials (e.g. planters) and place them in an indoor location, protect windows, skylights, and glass-panel doors by attaching shutters or plywood sheets or by taping windows to reduce the danger of flying glass, be sure gutters, drains, and downspouts are clear and flowing freely.

3. Inventory the disaster supply stockpile and replace or augment items as needed.

4. Any emergency equipment (generators, etc.) is handled by Physical Plant.

5. Secure the archival collection if necessary.

6. Disconnect electrical equipment and turn off utilities as appropriate. See instructions in Appendix R, Utility/System Malfunctions.

7. Verify with IT that necessary backups of software and data files will occur. See details in Appendix G, Data Processing Plans.

8. Brief disaster team and other staff on plans and confirm responsibilities.

9. Evacuate when instructed to do so.

10. After the storm, implement applicable procedures outlined in the Salvage Procedures section.

Response Procedures: Mold

In the event of a mold outbreak, take the following actions after informing Director:

1. If mold is on a few isolated items:

a. Place items in freezer bags located in disaster supply kit in 1st floor library supply room

2. If mold is discovered in whole stack ranges, drawers, or rooms, adjust temperature and humidity (50% relative humidity (+ or – 5%), 70° F (+ or - 2°)).

a. Obtain appropriate supplies from the disaster supply kit located in 1st floor library supply room and plastic in 1st floor library supply room or 2nd floor conservation room. Wear appropriate protective gear such as gloves, respirators/masks and glasses.

b. Seal materials in garbage bags located under the kitchen sink.

c. When dealing with a moderate- or large-scale mold problem, keep air movement to a minimum, since air currents spread mold spores to other, unaffected collections.

- Do not use fans in the area.

- Minimize the opening and closing of doors.

- If feasible, block off return air vents so spores are not spread into the air-handling system and to other storage areas.

d. Transfer all infected materials to an isolation room in such a manner that other areas will not be affected because of the transportation of materials. The following locations may be suitable: currently Library Room #.

3. Immediately and thoroughly sterilize the affected storage area(s), including the climate control system where possible.

4. Determine whether the affected items must be retained. If not, consider discarding, photocopying, or microfilming.

5. If the items must be salvaged, consult a conservator or preservation specialist (see Suppliers and Service Providers, Appendix B2) when dealing with severely affected materials. If the number of affected items is small, they may be treated in-house. See instructions in Lois Price's *Mold: Managing a Mold Invasion* for detailed instructions *or* reference *Appendix Q, Salvage Procedures* in the Appendix section of this manual.

6. Check materials periodically (at least monthly) for evidence of new or recurrent growth. Carry out these inspections for one year following the infestation.

Response Procedures: Earthquake

In this as in all disasters, the first priority is to protect human life and safety.

1. If you are in book-stack aisles or near file cabinets, move away from them.

2. Take shelter in a doorway, under a sturdy desk or table, or in another well-protected area.

After the main shock has occurred, take the following actions:

3. Be prepared for after-shocks.
4. Check for broken water pipes, shorting electrical circuits, leaking fuel, etc. and report to Facilities/Security. Do not use matches or lighters, since there may be flammable gas in the air.
5. Facilities/Emergency Team will turn off gas and water at main valves or meter boxes if necessary. Turn off all appliances.
6. Assist those who have been trapped or injured by falling debris, glass, etc. Do not move any seriously injured persons unless they are in obvious, immediate danger from fire, building collapse, etc.
7. Listen to a battery-powered radio and Security/Emergency Team for instructions.
8. Notify the fire department then Security of any fires.
9. Open doors carefully and watch for falling objects.
10. Do not use elevators.
11. Do not use the telephone, except in an emergency. The lines should be kept free for rescue operations.
12. Evacuate the building if it is safe to do so. Do not re-enter until the building has been declared structurally sound by the fire department.
13. Implement the recovery procedures in the Salvage Procedures section of the disaster plan.

Response Procedures: Medium-to-Large Scale Disaster

1. Assess the situation

The person who discovers the emergency will determine the nature of the damage, the number and type of library materials affected, and the extent of action and assistance needed.

- a. Contact Library Director (w), (c) or Head of Public Services (w), (c) who will make the determination by phone or through an inspection of the site.
 - b. Assist those who have been trapped or injured by falling debris, glass, etc. Do not move any seriously injured persons unless they are in obvious, immediate danger from fire, structural collapse, etc.

c. Through phone conversation or site visit, the responsible staff will determine whether or not to declare a disaster.

(1) The situation will be deemed an *emergency* if the nature and extent of damage is of limited severity and can be dealt with by available personnel. See the Salvage Procedures section and Appendix Q (detailed salvage procedures) for instructions.

(2) A *disaster* will be declared if the nature and extent of damage warrants resources beyond those available at the time.

2. Notification

a. Determine personnel needed

If declares a disaster, the notification plan will go into effect. All staff may be called to report for duty.

Personnel shall be informed exactly when and where to report. Additional details are provided in the Communication Plan (Appendix F).

b. Means of notification

If phones are working, use the phone numbers listed in the Staff List (Appendix A3). If phones are inoperable, each staff should use judgment to report to work.

c. Establish personnel management system

The Director (or backup) will establish mechanisms for the following:

- Check in/out times of all staff members, volunteers, ancillary personnel, and contractors in order to (a) keep records of who was at the recovery site at any given time, (b) ensure appropriate pay/compensation, and (c) track how long people have been working and make sure they take breaks or are relieved.
- Maintain records of time spent by individuals
- Training staff and volunteers.
- Provide space, supplies, and other materials needed for refreshments, meals, and rest areas.
- Effectively supervise supplemental staff.

3. Establish a command post

In a routine emergency where the building is intact, operations will be controlled and coordinated through the Director's office.

If offsite space is required for operations control or for salvage activities (sorting, packing, drying, etc.), Moisture Control Services will serve this purpose.

4. Procure/assemble the necessary supplies and services

The Director and staff will consult with Emergency Team to determine what supplies and services are required for the recovery operations.

The in-house supply/equipment stockpile inventory is produced in Appendix B1, Disaster Supply Stockpile.

External suppliers and service providers already identified are listed in Appendix B2, Suppliers and Service Providers.

If cash, purchase orders, or requisitions are needed, follow the instructions in Appendix H, Emergency Funds.

5. Establish security measures

a. Security will be responsible for employing personnel to secure the site as far as possible by replacing doors and windows, erecting a perimeter fence, or other means.

b. Only authorized persons will be allowed to enter the site.

c. Special security personnel may be required if the security system has been damaged, if doors or windows are damaged, or if the facility is not substantially intact. In such cases, Security will arrange for adequate security.

d. Unauthorized persons in the disaster area should be reported immediately to Security.

6. Get clearance to enter the site

After a fire or other major disaster, the Fire Marshal, Emergency Team or other public officials will be in charge of the building and will have the power to declare when it is safe for re-entry. No staff member will enter the facility until it has been declared safe.

If there are asbestos, PCBs, or other hazardous materials, it may be several days before clean-up is complete and the staff is allowed to enter the building. Clearance may also be delayed if the disaster is a result of arson or vandalism, for the area will be declared a crime scene and staff may not be allowed to enter until the forensic work is finished.

Reference: Appendix D1: Building Stabilization & Environmental Control will provide guidance on this topic.

7. Make a detailed damage assessment

The Director, Facilities/Security and Photographer will make a detailed assessment of damage. If appropriate, the librarian, archivist, or curator should be involved in the assessment, since s/he best knows the collections.

8. Stabilize the building

The Emergency Team will supervise the stabilization of the building. First priority will be given to actions that ensure the safety of people. Second priority will be for the restoration of power. Other actions will receive attention as soon as possible.

Actions that may be needed include the following:

- Emergency Team will work with Health Department on cleanup of sewage, biological agents, chemicals, and other contaminants.
- Shut off and repair/restore utilities (gas, electricity, etc.) (Emergency Team)
- Stabilize leaning or collapsed shelving.
- Remove mud, water, ceiling tile debris, broken glass, etc.

Appendix D, Building Stabilization and Environmental Control, provides additional details.

9. Stabilize the environment

The IT Dept./Emergency Team will supervise the restoration of environmental controls with the goal of providing a cool, dry climate in the affected area(s).

a. If the heating/air-conditioning system is operable, settings will be adjusted to provide maximum cooling and dehumidification, with the goal of maintaining the temperature below 70°F and the relative humidity below 50%. The system should run 24 hours per day.

b. If the heating/air-conditioning system is not working due to damage or power outage, Emergency Team will have it fixed.

c. The Director will ensure monitoring of the temperature and humidity at least every 4 hours to measure progress. The following monitoring devices may be used:

Ensemble Pointe Manger	On desk in workroom on 1 st floor
Digital Thermo/hygrometer	Right drawer of Director's desk

Appendix D, Building Stabilization and Environmental Control, provides additional details.

d. If warranted, provide suitable microclimates for wet wood, ivory, furniture, and other artifacts. See Appendix Q5, Salvage Procedures: Artifacts and Museum Objects, for further details.

10. Detailed plan of action

The Director and the Emergency Team will meet to review the extent of damage, status of building systems, and available personnel. They will develop a plan of action that addresses major issues in the library recovery plan. Library staff will assist where ever appropriate.

The Emergency Team/Administration will issue communications to the media and the insurance company.

The following are various decisions already made: damaged carpeting/furniture will be discarded, if not repairable; computer equipment questions, contact IT 2585; **conservation assistance, contact** Priority materials are: Rare Books, Archives valuable sets and folios; library services will resume **upon the Director's approval.**

Types of materials in our collection: paper, microforms, maps, photographs, archives, art, architectural models, paintings, etc.

Before salvage begins, the Director will:

- determine the salvage priorities for various parts of the collection. These will be based on the priorities given in the Salvage Priorities list and Appendix P, but adjusted based on the type and extent of damage and the services available. Be sure to include items in the building on loan (for exhibition, etc.) and materials brought in on approval or for appraisal.
 - determine the kind and degree of damage that materials in each location have sustained. These will be "gross" designations, not on an item-by-item or box-by-box basis, but (depending on the extent of the disaster) on a range-by-range, cabinet-by-cabinet, or room-by-room basis.
 - identify any parts of the collection that should be written off as a loss.
- Members of the disaster team will be called to the site as outlined in the Response Procedures section above and the Communication Plan (Appendix F).

Packout

Moisture Control Services will handle the majority of the packout processing. Below is basic information to consider when handling a packout: Materials must be removed from affected areas, either for immediate drying in a stable location within the library, for transport to a cleaning/salvage area or to a freezer or drying facility. If the option of on-site dehumidification is to be used, only soaked items need to be removed.

If a full range of recovery services is available, it is generally appropriate to begin working on the wettest materials, then deal with those that are merely damp. However, if the organization is limited to air-drying using staff resources, it may be better to begin with those that are least damaged and therefore most easily salvaged.

Packout procedures depend on whether materials are being transported to a nearby area for immediate drying or to an off-site freezer or drying facility. The latter requires more careful packing and more thorough documentation.

Depending on the nature of damage and possible logistical constraints, each work crew in the packout operation will generally consist of the following:

- a. crew leader: ensures smooth work flow, alleviates bottlenecks, troubleshoots
- b. box assembler: sets up boxes, milk crates, ResCubes, or other containers
- c. retriever: removes materials from shelves, cabinets, floor, etc., attempting to pull materials of similar size for each container
- d. wrapper: cuts freezer/waxed paper
- e. packer: takes items from retriever and wrapper, and boxes items
- f. sealer: seals and (working in concert with recorder) labels containers
- g. record-keeper: keeps a written packing list
- h. transporter(s): moves containers from packing area to pallet, elevator, stairs, etc.
To move materials within the building during packout, use book trucks, hand carts, or dollies located at the elevator doors on each floor and in the workroom on the 1st floor. Metal book trucks and carts are preferable. If only wooden ones are available, they should be well covered with heavy plastic sheeting to prevent damage to their finish.

Take the following precautions if materials are to be transported in cardboard boxes:

- Boxes should be no larger than 1.5 cubic feet.
- Line the boxes with heavy-duty trash bags before placing wet materials inside.
- This will prevent the boxes from becoming soggy and collapsing.
- Do not stack boxes more than 4 high. The boxes can be stacked on pallets and the pallets can be shrink-wrapped to prevent slippage during transportation. A fork lift can then be used to move the pallets onto trucks or to the drying area.
- If possible, loosely sort materials according to the degree of wetness (soaked, damp, or dry).
- Pack like materials together--e.g., damp records or volumes in one box, soaked ones in another. Bound volumes: Load into boxes or milk crates for transport. Place normal-size volumes in a "spine-down" position. Pack large volumes flat in boxes. If time allows, loosely place sheets of freezer paper or waxed paper around every volume (or every other volume). Boxes should be packed only about 75% full to allow for swelling.

DO PACK BOOKS TO MINIMIZE STICKING, DISTORTION AND SWELLING

When possible, maintain order and proper sequence. Give priority to 19th and early 20th century leather bindings, and to coated paper. Place waxed/freezer paper or deli wrap between books to prevent sticking. To help keep the textblocks from separating from or distorting the covers, place books one at a time, in either of two ways: flat reversing spines, as shown in Figure A, or spine down in a single layer, as shown in Figure B. Support each book firmly on either side to prevent further swelling. To minimize warping, pack books next to others of

similar size. Pack boxes tightly enough to reduce shifting, but do not crush. Books will emerge from freezing in pretty much the same condition as they went in.

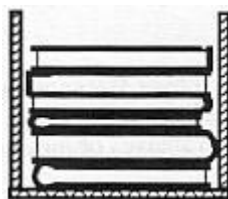


Figure A

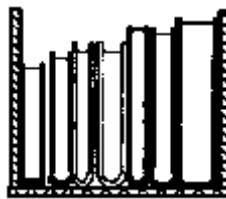


Figure B

DO PACK MATERIALS TO PROVIDE SUPPORT AND MINIMIZE SHIFTING

Records that are stored in boxes may be frozen, box and all, if box is still strong. It is also possible, in the interest of saving handling and reducing identification problems, to freeze entire file drawers removed from cabinets (however this can pose a problem of weight). If folders are to be packed in boxes, fat the box or lay the box on its side so that the folders don't need to be supported as they are loaded, as shown in Figure C. Interleave folders every two inches with waxed/freezer paper or deli wrap. Loose documents or those that have become separated from their folders may be piled flat in boxes. Fill the space between piles of documents and the sides of the box loosely with crumpled paper towels or other absorbent non-printed paper to prevent the contents shifting when boxes are moved, as shown in Figure D.

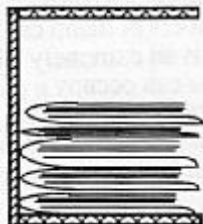


Figure C



Figure D

Files: Place folders in boxes or milk crates. Place the folders vertically in boxes (standing as they would in a file drawer). Fill boxes only about 75% full to allow for swelling.

Photographic materials: Most can be left in cool, clean water for a few hours until ready to dry or send for reprocessing. See further details in Appendix Q2, Emergency Salvage of Photographs.

Microforms: Place in cool, clean water until ready to transport for reprocessing. See further details in Appendix Q3, Salvage Procedures: Microforms.

Oversized prints and drawings: Pack in map drawers, bread trays, shallow flat boxes, or on heavy cardboard or plastic-covered plywood.

Audio and videotapes: Keep wet. Pack vertically in plastic bags or containers with cold water.

Computer diskettes: Keep wet. Pack vertically in plastic bags or containers with cold water. See further details in Appendix Q4, Salvage Procedures: Computer Media.

Computer tapes: Pack vertically in a plastic container and fill with clean water. See further details in Appendix Q4, Salvage Procedures: Computer Media.

DON'T!

Don't pack books with spine up (bindings will sag and textblocks will pull out of bindings).

Don't pack with unequal sizes side-by-side (smaller ones won't adequately support larger ones).

Don't pack a second layer of books on top of spine-down books (creates too much weight for books on bottom and provides inadequate support for books on top).

Don't pack books or papers with too much space at the bottom (will allow shifting).

Don't haphazardly stack or cross-stack boxes that are filled (risks toppling or crushing boxes). (From ProText, Inc. website)

Documentation

For inventory control as well as insurance purposes, it is necessary to know the condition and disposition of materials. Which were destroyed? Which need to be removed or replaced? Which were unharmed or sustained only minor damage? Which were damaged but are salvageable?

As materials are removed, one team member will label each container on all four sides with a brief designation of its contents. Describe contents by shelf, range, or call number, by cabinet or drawer, by record group or series, and so on. If time allows, also indicate the number of volumes or archives files in each box, describe the damage (e.g., "wet," "dry," "smoke," "mud," etc.), and indicate the salvage priority of items in the box. If materials are going to different areas (e.g., some to the rinsing stations, others to the air-drying area, and some to a freezer), also note the destination of each container. A typical box might be labeled as follows:

CALL # RANGE	DAMAGE	SALVAGE PRIORITY	DESTINATION
QA1.A-QA1.E	WET	HIGH	FREEZER
PHOTOGRAPHS	WET	HIGH	Room

If there is a large quantity of containers, give each a brief designation (e.g., floor/section designation and box number), and use a written inventory/packing list to record detailed information regarding contents, damage, and priority. A sample packout list is included in Appendix L, Forms.

Throughout the salvage operation, it is also useful to document various decisions made (particularly the decision to discard) and who made/authorized them. This will be the responsibility of the Director.

The Photographer (currently library staff) will take photographs or videotape the salvage operations to document the recovery effort.

Removal

If elevators are working, they will be used. If not, the following strategies may be used:

Materials to be discarded – toss from window into a dumpster suspended by cranes

Materials to be sent to an offsite location – use a human chain down stairs, book truck/dolly to waiting transportation OR lay plywood on stairs to create ramps for sliding boxes down OR slide boxes out windows to waiting ramps, cranes, etc.

Rinsing

Materials may be rinsed before drying or freezing if they have been subjected to mud, sand, or other dirty deposits and if adequate personnel and time are available. The objective of the cleaning is not to make the materials pristine, but to remove gross deposits. If not rinsed, the mud, etc. brushes off later.

Never use these rinsing techniques on materials with soluble inks (watercolors and many manuscripts), animal skins (leather, vellum, or parchment), or works of art on paper.

The library loading dock area is an appropriate area for the rinsing operations, if weather permits. If bad weather, this process can occur in the 1st floor janitorial closet.

Personnel working in the rinsing area should be provided with rubber boots and gloves and waterproof clothing, glasses and masks. These safety supplies are available from the disaster kit in the 1st floor library supply room. If the water has been contaminated by sewage or other contaminants, workers will have additional protective gear as recommended by the Director.

The rinsing stations may be set up in either of the following ways, depending on the type of rinsing that is needed:

- **If deposits are so light** that a single brief rinsing will remove them, each station may consist of one garden hose with a spray nozzle.
- Rinse individual folders or volumes one at a time, holding the folder/volume tightly closed to avoid transferring dirt between the pages.

- **If deposits are heavy:**

Set up a series of 3-8 large (30- to 50-gallon) plastic garbage cans.

Have a garden hose running into each can, with the nozzle resting at the bottom, and turn water on to provide a slow but continuous flow into each one.

Workers will take each item to the first can, hold it firmly closed and immerse it, move

to the second can and immerse the item, and so on through the line. Keep a supply of sponges at the last can, so that mud can be lightly dabbed off there. The last station will have a hose with spray nozzle so that workers can rinse materials under a fine spray. Gently squeeze excess water from volumes or folders.

Do not attempt to remove mud or stubborn stains during the rinsing process, for that would significantly slow down the operation. In addition, it might damage the materials, and it usually drives mud and stains even deeper into paper fibers, making restoration even more difficult.

The same procedure may be used for **photographic materials and computer media**, **except** that shallow dish pans or photo processing trays may be placed on tables and used instead of garbage cans.

Once materials have been rinsed, they may be transferred to the air-drying area or packed for transport to a freezer or drying facility as outlined above in the packing instructions.

Freezing

Freezing may be used as a stabilization technique for wet materials, especially paper-based ones. It should be used whenever materials cannot be dried within 48-72 hours, because wet materials are at great risk for developing mold if the temperature is above 70°F, especially in high-humidity conditions. In addition, bound volumes cease swelling and inks cease "bleeding" or diffusing once frozen. In a medium-to-large scale disaster, freezing "buys time" for the organization: once the materials are stabilized by freezing, funds can be obtained, drying options and vendors can be evaluated, and the staff can take a break after the taxing work of packout. There is no limit on the amount of time that materials may be left frozen. In fact, paper tends to dry slightly while in a freezer.

Bound volumes and paper records are suitable for freezing. In a large-scale disaster, microfilm and most other photographic materials can also be frozen, though that is not ideal. Historic photographs (such as daguerreotypes, tintypes, ambrotypes) should never be frozen.

For best results, use a commercial blast freezer, one that freezes materials at -10°F or lower. Commercial freezer facilities for our organization are listed in Appendix B2, Suppliers and Service Providers. (Moisture Control Services will be used.)

In an area-wide disaster such as a flood, there may not be a local freezer facility. In that case, we may use a refrigerated truck for transporting materials to a remote facility or for temporary cool storage on-site. While a truck will not freeze the materials, it may keep them cool enough to prevent mold growth. Sources of refrigerated trucks are listed in Appendix B2, Suppliers and Service Providers.

Drying Techniques

[Full description is in Appendix Q.]

When books/materials are to be air-dried, the following procedures will be used by staff:

Secure and CLEAN an appropriate area for use for air drying.
Place fans in area to continually circulate air, not blowing directly on documents
Place on floor, tables, etc.
Interleave at least every 50 pages, starting from the back of the volume with paper towels
or clean, uninked newsprint
Interleave front and back covers by placing clean blotter paper inside
Stand the volume on its head, fan it open, place it on several sheets of absorbent paper
Change the interleaving frequently
Turn the volume over each time it is interleaved

If materials are to be commercially dried (off or on site), take the following steps:

The Director will contact outside supplier and will direct staff on procedures required by the supplier.

Fire Damage

When dealing with fire damage to special materials (art works, photographs, magnetic media, computer equipment, etc.), consult one of the conservators or other specialists listed in Appendix B2, Suppliers and Service Providers. Special procedures for computer media are outlined in Data Processing Plans (Appendix G).

Charred Materials

Damage caused by extremely high temperatures is irreversible. However, the information on charred materials sometimes can be recovered through special photographic methods. These methods are usually carried out only in forensic science laboratories and are only available in exceptional circumstances. **In the absence of professional help** do not attempt to open charred bundles, for such handling will result in further damage.

Even if materials are not charred beyond recognition, exposure to high temperatures will cause the paper to become extremely brittle. Such records should be evaluated. Some may be discarded, and others may be microfilmed or photocopied to preserve the information.

If edges of bound volumes are charred or badly smoke-damaged, they can be sent to a library binder, who will remove the binding, trim the edges of the paper, and rebind the volumes. A list of certified library binders is available from the Library Binding Institute (see Appendix B2, Suppliers and Service Providers).

Consult Head Conservator or one of the conservators or other specialists listed in Appendix B2, Suppliers and Service Providers. Special procedures for computer media are outlined in Data Processing Plans (Appendix G).

Smoke/Soot Deposits

If smoke/soot is deposited on the edges of materials, they can be treated in the following ways:

- Send the materials to a binder who can guillotine off the smoke-damaged edges
- Treat the materials in-house, using natural latex sponges to remove the smoke from the edges of bound volumes.
- Rare, archival, or special collections materials should be evaluated by a conservator before employing any general-purpose smoke removal techniques.

Consult Head Conservator or one of the conservators or other specialists listed in Appendix B2, Suppliers and Service Providers. Special procedures for computer media are outlined in Data Processing Plans (Appendix G).

Smoke Odor Removal

Professional companies can deodorize fire-damaged paper materials. There are three major options:

- Some companies essentially "perfume" damaged materials to mask the odor. Many such companies can be found in the Yellow Pages under "Smoke Odor Counteracting Services."
- Materials may be treated in an ozone chamber. Ozone effectively neutralizes the odor. However, ozone is a powerful oxidizing agent that irreversibly accelerates the aging of paper, so it generally should not be used on archival or intrinsically valuable materials. Companies listed in Appendix B2, Suppliers and Service Providers, provide this service, often in combination with trimming and rebinding of bound volumes. Some states have outlawed the use of ozone, so be sure to check with appropriate safety officials.
- Storage boxes that incorporate zeolites have shown to be effective in odor reduction. Place dried volumes or papers in the boxes, and they may remain there indefinitely. Sources of these boxes are included in Appendix B2, Suppliers and Service Providers.

Consult Head Conservator or one of the conservators or other specialists listed in Appendix B2, Suppliers and Service Providers. Special procedures for computer media are outlined in Data Processing Plans (Appendix G).

Fumigation

Water-related disasters, including water left from firefighting operations, create an environment ideal for mold growth. Give high priority to the fumigation and sterilization of mold-infested materials, and keep such materials segregated from those not yet infested.

There are many divergent opinions about fumigating collection materials. If the decision is made to fumigate, every precaution must be taken to safeguard the collection materials and the health of personnel. Potential effects on the environment also must be considered.

a. Ethylene Oxide Fumigation. Ethylene oxide long was the most commonly used fumigant, favored because of its effectiveness over a wide range of problems. However, studies have indicated that exposure to this chemical may accelerate the aging of leather, parchment, paper, rubber, and some plastics. There also are hazards to human health, and the ethylene oxide absorbed by the treated materials is released slowly over time. Because of these dangers, ethylene oxide should not be used.

b. Area Fogging. If the mold infestation is widespread, fogging the area with a fungicide may be advised. Remember that fogging kills only the mold that is growing on exposed surfaces, and the procedure may have to be followed up by more intensive fumigation. Area fogging should only be undertaken by a licensed fumigator.

c. Cleaning and Sterilization. The affected area must be cleaned and sterilized before it is used to store collection materials. The cleaning crew should wear protective clothing and eye-wear. The following procedures are recommended:

1. Remove all curtains and sterilize them in an autoclave if the fabric will tolerate such treatment. Then launder the curtains.
2. Remove any incidental materials from the area, leaving only the main pieces of furniture.
3. Thoroughly clean carpets with a germicidal cleanser. Remove as much moisture as possible from the carpets.
4. Provide good air circulation in the room along with air-conditioning and dehumidification.
5. Thoroughly wash floors, ceilings, walls, shelves, fixtures, and furniture using a germicidal cleaner. Disposable wipes should be used to avoid the spread of contamination.

Additional instructions are available in Sandra Nyberg's *The Invasion of the Giant Spore* (Atlanta: SOLINET, 1987; available from SOLINET, 1438 W. Peachtree St., Suite 200, Atlanta, GA 30309-2955; 800-999-8558) and Lois Olcott Price, *Mold—Managing a Mold Invasion: Guidelines for Disaster Response* (Philadelphia: Conservation Center for Art and Historic Artifacts, 1994; available from CCAHA, 264 S. 23rd St., Philadelphia, PA 19103; 215-545-0613). [Attach a copy here or in Appendix Q (Salvage Procedures), specify where copies can be located, or refer to the Bibliography (Appendix T) if it gives locations.]

Wrap-Up and Evaluation

After the salvage operation is complete, evaluate the effectiveness of the disaster plan. Talk with those involved. Were they sufficiently prepared? Did the plan work? How could it be strengthened? Revise your disaster plan accordingly.

Remember to extend thanks to all those within and outside the organization who assisted in the recovery operation.

SALVAGE PRIORITIES

1. Archives
2. Rare books

3. High value sets
3. Ffolios
4. Reference
5. Regular monographs
6. Regular serials

Sources used:

Disaster Preparedness Workbook for U.S. Navy Libraries and Archives by Lisa L. Fox.

Emergency manual for Cincinnati City Hall by Cincinnati Facility Management
Cincinnati Museum Center disaster plan.