Columbia University Libraries
Preservation & Digital Conversion Division

Disaster Response Manual

for Care of Library Materials

2008 Edition

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INTRODUCTION

This Disaster Response Manual contains instructions on how to salvage library materials that are involved in floods and other disasters, as well as guides to prevention and planning. The Manual has been redesigned to be easier to use. Specific types of media are listed with their treatments. Please take the time to review this information with your staff and update the worksheets as necessary, because you never know when a disaster will strike. The time to prepare is before it happens.

I. EMERGENCY CONTACT LIST

NOTIFY THE FOLLOWING IMMEDIATELY:

1. **SUPERVISOR:**_____ **Work#** _____
   Home#_____

2. **SECURITY: 99 (MORNINGSIDE)**
   7-7979 (HEALTH SCIENCES)
   (Note: Security will notify the Fire Department, Con Ed, ambulance, etc. as needed)

3. **FACILITIES: 4-2275 (MORNINGSIDE)**
   7-3753 (HEALTH SCIENCES)

   Give Facilities the following information if you can:
   - Whether electricity needs to be turned off
   - Whether auxiliary power is needed
   - Whether water needs to be turned off
   - Whether a leak will have to be traced
   - Whether help will be needed with water clean-up (e.g. wet vacuums & fans).

4. **PRESERVATION DISASTER RECOVERY TEAM:**

   IMPORTANT! DON'T JUST LEAVE A VOICE MAIL MESSAGE!
   KEEP DIALING UNTIL YOU SPEAK TO SOMEONE!

854-5757	854-3580	854-2223	854-5892
854-8081	854-1336	854-1332	854-5519

   Give the following information. Stay calm and try to be as specific as possible.
   - Your name
   - Phone number
   - Nature of emergency
   - Location (building and room number); be prepared to give **directions!**
   - Size of the problem
   - For fires: any peculiar odors present
   - Whether any personal danger/injuries are present

5. **LIBRARY ADMINISTRATORS:**
   If your immediate supervisor is not available, call the following people, in the order listed, until you reach one of them:

		work phone #	home phone #
Department Head:	_____	_____	_____
Head of Library:	_____	_____	_____
Director:	_____	_____	_____
Assoc. Univ. Librarian:	_____	_____	_____

Page last updated_____

OTHER IMPORTANT PHONE NUMBERS

The people listed below are ordinarily called automatically by Campus Security in cases of fire, chemical or radiation spill. However, if for some reason Campus Security does not do this, the library unit should contact the people listed below, as appropriate.

Fire or Explosion:

Fire Safety Officer

398 Engineering Terrace (Morningside)
854-6676, 854-8749

601 W 168, Suite 58 (Health Sciences)
305-6780, 795-3067

During fire or explosion, Security and Facilities personnel are placed under the Fire Safety Officer's direction.

Chemical or Radiation Spill:

Environmental Health/Safety

398 Engineering Terrace (Morningside)
854-4442, 854-4658, 854-6532, 854-8749

601 W 168, Suite 66 (Health Sciences)
305-6780, 795-3067

Explain the situation and ask to be connected to the most appropriate person.

RISK MANAGEMENT

Office of the Treasurer and Controller

1700 Broadway, 10th floor, Mail Code 7713, New York, NY 10019
telephone 854-9702 fax 854-9709 email nd2027@columbia.edu
online disaster report form: http://www.columbia.edu/cu/controller/rm_forms.htm

Call Risk Management in the event of any disaster affecting more than about 150 volumes or equivalent amount of material, or under any circumstances where the salvage of damaged materials seems likely to exceed the Libraries' ability to cope with the disaster internally; this includes ANY instance in which there is widespread, active mold growth. Salvage procedures such as freeze-drying of wet collections, dehumidification of large interior spaces and disinfection of spaces and collections affected by mold may be contracted out to a disaster recovery vendor when deemed necessary by Risk Management, Environmental Health and Safety, or Preservation (see Section II.B., Next Steps).

If you want to be reimbursed for damage or losses, Risk Management will need to be notified within 24 hours of discovery of the disaster. If the disaster is small and no claim for reimbursement will be filed, it is still advisable to fill in the online report form to register the incident for future reference (see Section II.C., Financial Issues).

II. DISASTER IN PROGRESS

A. FIRST STEPS FOR RECOVERY

1. **STAY CALM.**

2. **PERSONAL SAFETY COMES FIRST!**

3. **QUICKLY IDENTIFY THE PROBLEM AND GENERAL EXTENT:** Is this a water leak from above, a flood, collapsed shelving? In general terms, how much space is involved -- a few boxes of materials, one section of shelving, an entire room?

4. **CALL FOR HELP IN THIS ORDER:**

Security:	99 (Morningside)	7-7979 (Health Sciences)
Facilities:	4-2275 (Morningside)	7-3753 (Health Sciences)

   If the problem involves water, ask Facilities to turn off or divert the water at the source if possible. Tell them you will need help cleaning up the water immediately.

   Preservation Disaster Recovery Team: 4-3580, 4-8081, 4-5757, 4-1336, 4-1332, 4-5892

   Unit Or Library Supervisor: _____

   - See Section I, Emergency Contact List, for more details and other important numbers.

5. **Take safety measures.** Determine if the area is safe to enter. Contact Health & Safety Office if there is any doubt (Morningside 854-8749, Health Sciences 305-6780) or Security (Morningside 99, Health Sciences 7-7979). Be alert for computer cords or extension cords for fans and other appliances sitting in water, either on the floor or on metal shelves. If necessary, have the power turned off to eliminate danger of electrical shock. Check floorplan (Worksheet D) for breaker boxes or call Facilities (Morningside 854-2275, Health Sciences 7-3753) and ask for the power to be shut off when reporting the problem (and asking for cleanup, wet vacs, fans.)

   If computers are wet or cords are submerged, call the Library Information Technology Office (854-4969 or 854-7617). See Appendix D.

   If moldy materials are encountered, see Section III.A., Specific Media Instructions.

6. **Contact the people in charge**. The person responsible for the area where the disaster is happening should be contacted. At times when that person is unavailable, s/he should have previously designated responsibility for disaster response to an appropriate staff member. (See Worksheet A.) Also post someone at the entrance to the disaster to keep out unauthorized personnel.

7. **Assemble a recovery team.** The team may consist of staff in the affected area, Preservation staff, other staff from the affected division as needed. Call in help as needed using the emergency phone tree and staff list (see Worksheet A).

8. **Protect library materials, computers, etc**.
   - If there are active leaks: cover ranges of books, film cabinets, computers, etc. with plastic drop cloths immediately, or, if possible, move volumes out of the area.
   - If a flood is in process: move any materials off the floor, and off of low shelves if they appear threatened.
   - If you lack supplies of plastic sheeting (drop cloths) and other necessities, call the closest disaster supply center (see Appendix B).

9. **Control the environment as quickly as possible.**
   - Check to see that Facilities is working to identify and correct the sources of the leak or other problem.
     - Stay in contact with Facilities to make sure they keep working until water has stopped flowing. A shift change occurs at 3 pm which sometimes causes work to stop.
     - Find out which Facilities supervisor is in charge of the work, and who will take over when that person leaves for the day. Keep in touch until you get confirmation from the supervisor that the immediate emergency has been stopped and that the underlying problem has been corrected.
   - Reduce temperature and increase ventilation in the disaster area in order to lower humidity. Often, Facilities staff suggest turning the heat up. **DO NOT DO THIS**. It will encourage mold growth. *Turn off heat, open doors and windows*, turn on air conditioning, use fans to increase air circulation. This will help retard mold growth. Fans should normally run 24 hours a day until the materials and area are dry. Fans are available from Facilities or Preservation.
   - Attempt to have standing water removed from disaster area as quickly as possible. Get carpets as dry as possible. Wet vacs are available from Facilities Operations or the appropriate Disaster Supply Center.
   - If carpeted areas have suffered water damage, remove the carpet if feasible. The moisture retained by carpeting increases the humidity and chance of mold growth.

10. **Identify and prepare a "staging" area.**
    - Locate and prepare an area in which to sort and dry material. A large amount of table space will be required for even a few hundred wet books or other items. Stabilize the work environment. It is important to keep air circulating in areas where wet material is being handled. If possible, reduce the humidity in the space.
    - Stock area with: plastic sheeting, paper towels, boxes, other supplies as needed. If you need more supplies, contact your closest disaster supply center (see Appendix B) or Preservation.
    - Cover book trucks and tables with plastic sheets.

11. **Move damaged materials**. Before removing any materials from the disaster area, be sure to give the recovery team clear, simple instructions. The basic principle is **MINIMIZE HANDLING OF DAMAGED MATERIALS**!
    - Frequently the best way to remove damaged materials is by using a "human chain." The number of staff on hand and the extent of the damage will determine the feasibility of this method.
    - Handle material carefully. Wet paper in particular is very fragile.
    - Do not try to separate single-sheet material (maps, posters, etc.).
    - Do not let wet materials come into contact with wooden book trucks or tables. They may adhere to wet varnish.
    - When moving and packing wet materials, do not disturb the condition in which you find them.
    - Do not try to clean materials, or flatten them, or squeeze out water.
    - If moldy materials are encountered, see Section III.A., Specific Media Instructions.

- If in doubt, **ASK**.

B. NEXT STEPS

1. **EVALUATE THE SITUATION:** Quickly estimate the extent of the damage to library materials, equipment, rugs, furniture, walls, etc. What is the approximate number of volumes or other library materials involved? Should Risk Management be called?
   - A **minor disaster** involves up to around 150 bound volumes or equivalent amounts of other materials, either wet or partially wet. A minor disaster is one that can be handled by you and your staff with assistance from Preservation. To handle a minor disaster, you should be able to clear and prepare enough table space to spread out and air dry all of the wet material. Some materials may still be selected for freezing or other special salvage methods after discussion with Preservation staff.
   - A **moderate disaster** involves up to around 1,000 volumes or equivalent materials, and may be able to be handled internally or may require the assistance of Risk Management and/or professional salvage contractors. Factors such as the presence of mold, how wet the materials are, the availability of staff to carry out salvage operations, and the availability of space to air-dry wet or damp materials will determine how and where the salvage effort will take place. If you feel that the disaster exceeds the in-house resources available, or if there is mold present on a significant number of items, contact Risk Management in addition to the Preservation Division for assistance in assessing the situation.
   - A **major disaster** affects over 1,000 volumes or equivalent and will very likely be turned over, at least in part, to a professional salvage contractor. Risk Management will need to be consulted as soon as possible when a salvage contractor is hired.

2. **Notify Risk Management** (call 854-9702) or ask Preservation to make the call. If any significant amount of library materials, furnishings, computers, or infrastructure are damaged or if any vendor costs are likely to be incurred during disaster response or cleanup, Risk Management needs to know as soon as possible that the incident has occurred, preferably immediately but certainly within 24 hours of discovering the problem. Report the nature of the problem and the estimated types and amount of damage and costs to be incurred.

   Moderate and major disasters may require that collections be frozen in order to stabilize them until further treatment can be undertaken. Since Columbia does not have freezer facilities for more than a few books, a professional contractor must be called any time the damage is significant enough to require freezing of collections. Preservation will make arrangements for hiring a contractor through Risk Management; if Preservation staff is not available, call Risk Management directly. If you are unable to contact either Risk Management or Preservation, contact your divisional director (who has the authority to release funds) or your AUL, and then call one of the salvage companies listed in Appendix C.

3. **Sort damaged materials into categories for treatment.** See referenced parts of Section III, Specific Media Instructions.
   - Coated stock ("glossy paper") volumes and loose items: periodicals, art books, architectural "linens". See Section III.B.
   - Bound volumes or loose paper materials thoroughly soaked. Handle these as little as possible and **CAREFULLY**! See Section III.C.1-2.
   - Bound volumes or loose paper materials wet around the edges. See Section III.C.1-2.
   - Bound volumes or loose paper materials slightly damp. See Section III.C.1-2.
   - Illuminated manuscripts and/or manuscripts on parchment. See Section III.C.2.
   - Oversize or rolled materials (maps, plans, drawings). See Section III.C.3.
   - Works of art (prints, drawings, paintings). See Section III.C.4.
   - Photographic materials (photographs, negatives, slides, motion pictures, microforms). See Section III.C.5.

- Phonograph disks (LPs). See Section III.C.6.
- Computer diskettes (floppies) and optical disks (CD-ROM). See Section III.C.7.
- Magnetic tapes (audio and visual). See Section III.C.7.

4. **Secure the materials**. Materials left for air-drying in the unit (i.e., those not sent away for freezing or other treatment) should, if possible, be kept in a secure area, so they will not be disturbed by staff or users. Rare or valuable materials must be moved to locked areas.

5. **Dry any wet spaces within 24 hours**.
   - Work with Facilities to vacuum up all water, and to dry wet carpets and upholstery.
   - Have Facilities move in dehumidifiers and fans as needed.
   - If you need additional fans, dehumidifiers, extension cords, etc, contact your nearest supply center (see list in Appendix B), or contact Preservation.
   - Do NOT turn the heat up until all wet collection materials have been removed. Hot moist air will encourage mold growth.

6. **Set up workflows for evaluation of damaged materials**.
   - Work with Preservation to set up workflows for evaluation for withdrawal/replacement or treatment.
   - Have the appropriate selector(s) review materials as soon as possible during early stages of disaster recovery, preferably during triage, in order to avoid unnecessary/expensive effort to save materials that can be easily replaced or discarded.

7. **Determine how much damage has occurred.**
   - Count the approximate number of items affected: items soaked, items able to be air-dried, items likely to need replacement; also damaged furniture, computers, etc.
   - If possible, take photos of the area to document damage to the space (ceilings, floors, etc.), equipment, furniture, and library materials.

8. **Set up workflows for having treatments done and replacements ordered.**
   - Work with Preservation and other units to set up workflows for processing materials that will be treated in Conservation, sent for rebinding and other vendor services, or replaced.
   - Arrange for tracking of materials during the recovery phase.

9. **File a Risk Management Property Loss Claim Report Form**
   - Fill in the form online at http://finance.columbia.edu/forms/index.html. Scroll down to the Risk Management Section. This form serves as the initial report on the incident. Also print out a copy and send it to Preservation.
   - Fill in this form **even if NO library materials appear to be damaged**, since moldy items are sometimes discovered months later. Enter the phrase "Incident report only" in the section where property damage is described. Reports also help them track recurrent incidents due to pre-existing leaks and other maintenance problems.
   - If you have previously reported a leak or other problem to Facilities (and can document it), Risk Management may be able to charge Facilities for the deductible that the Library will otherwise have to pay. See Section II.C., Financial Issues, for further details on insurance and Risk Management.

10. **File a Post-Disaster Report Form** with Preservation (see Worksheet E).

11. **Order new disaster supplies** to replace those that have been used up (see Worksheet B).

12. **Maintain a close watch on the area** of the problem for several days in case it recurs (a frequent event with leaks).

C. FINANCIAL ISSUES

1. Costs arising from disasters

Significant amounts of library materials, furnishings and carpets, computers and other equipment, or infrastructure may be damaged or destroyed during a disaster. Costs to the Libraries may include replacement or repair of materials, furnishings, or equipment, and repair to infrastructure. In addition to purchase and repair costs, vendor costs may be incurred during disaster response or cleanup, and there may be Facilities charges for repair to infrastructure.

Moderate and major disasters may require that collections be frozen in order to stabilize them until further treatment can be undertaken. Since Columbia does not have freezer facilities for more than a few books, a professional contractor must be called any time the damage is significant enough to require freezing of collections. Preservation will make arrangements for hiring a contractor through Risk Management; if Preservation staff is not available, call Risk Management directly (854-9702). If you are unable to contact either Risk Management or Preservation, contact your divisional director (who has the authority to release funds) or AUL, and then call one of the salvage companies listed in Appendix C.

2. Insurance

Columbia is self-insured. Risk Management handles all claims for reimbursement. They cover damage and destruction from water, fire, collapse, theft, vandalism, and similar catastrophic incidents. They do **NOT** cover Libraries staff costs. They do **NOT** cover damage and destruction due to long-term problematic conditions such as routine substandard temperatures or insect infestations.

3. Deductible

There is a deductible which the Libraries must pay before Risk Management begins covering costs. If the disaster is caused by a leak or other maintenance problem you have **previously reported** to Facilities (and can **document** it), Risk Management may be able to charge Facilities for the deductible that the Libraries will otherwise have to pay.

Each divisional director is responsible for working with Financial Service to determine how the deductible will be covered.

4. Working with Risk Management

Risk Management needs to know as soon as possible that an incident has occurred, preferably immediately but certainly within 24 hours of discovering the problem. Call to verbally report the nature of the problem and the roughly estimated types and amount of damage and costs to be incurred. Risk Management staff can help with estimates.

Property Loss Claim Report Form. As soon as possible, Fill in the form online at http://finance.columbia.edu/forms/index.html. Scroll down to the Risk Management Section. This form serves as the initial report on the incident. Also print out a copy and send it to Preservation Fill in this form **even if NO library materials appear to be damaged**, since moldy items are sometimes discovered months later. Enter the phrase "Incident report only" in the section where property damage is described. Reports also help them track recurrent incidents due to pre-existing leaks and other maintenance problems that may help avoid the deductible.

In order for Risk Management to provide reimbursement, **the claiming Library** (NOT Preservation) will need to submit itemized invoices covering any replacement library materials, furniture, computers purchased as replacements, as well as invoices covering any vendor services for drying, cleaning, or rebinding or other treatments. Preservation will work with the Library to arrange for invoicing on repairs and treatment of library materials.

Risk Management allows **one year from date of the incident** to file all invoices. If you anticipate difficulty getting an invoice within one year, let Risk Management know as soon as possible.

5. Photographic documentation

It can be helpful in filing a claim to have photographic documentation of damage to facilities and materials.

III. DETAILED INSTRUCTIONS FOR SPECIFIC MEDIA

A. MOLD OUTBREAKS

When individual moldy items are discovered:

If mold is discovered on any **individual** library materials, please treat the item(s) as follows:

- Wear respiratory protection, at minimum a nuisance dust mask. If you experience an allergic reaction, leave the area at once.
- Handle items as little as possible. Do not flip pages or otherwise disturb mold spores.
- Isolate moldy items from other materials by putting them in sealed plastic bags. Before bagging, write down any visible information needed to track the status of the item (call number, etc.) and label the bags (include a warning such as "Moldy books" so others will not mistakenly open them).
- Wash your hands, and thoroughly clean any surfaces with which the items have come in contact before placing clean materials there.
- *Immediately* contact Conservation (4-3580, 4-8081) to discuss options for cleaning. Mold will continue to grow inside the bag, and if cleaning is required, it is best accomplished as quickly as possible. Bear in mind that cleaning is time-consuming and requires extensive precautions to minimize hazards to the staff involved. In most instances, replacement of any moldy materials will be the preferred option, and cleaning will only be possible in selected cases.

The presence of mold often indicates a slow or undiscovered leak. Carefully examine all materials stored nearby to be certain that no other materials are also moldy. It is helpful to make a note of where the moldy item was located to assist Preservation and Facilities in determining the source of the problem.

If you are uncertain whether the substance you are seeing is actually mold, contact Conservation (4-3580, 4-8081) for consultation.

When sections of collections are discovered to be moldy:

On rare occasions, incorrect environmental conditions permit widespread mold growth on **entire collections or large portions of collections**. If this happens, do not attempt to remove or handle moldy materials. Instead:

- Contact Preservation *immediately* using the phone numbers in Section I, Contact List, above.
- Call Environmental Health and Safety (Morningside 854-8749, Health Sciences 795-3067)
- Isolate the area as much as possible. Air circulation should be minimized until the mold is removed to prevent spread to other areas.
- Restrict access. Do not let patrons or staff into the area, except those dealing with the situation.

Preservation and the Environmental Health and Safety Office will be able to advise on incident-specific procedures for protecting collections and staff, and they can arrange to have the mold tested in order to identify it.

B. COATED (GLOSSY) PAPER

Coated paper is the glossy or shiny stock that many illustrations, "coffee table books" and periodicals are printed on. It is coated with a clay-like material that dissolves when wet, and adheres irreversibly to adjacent pages. Freezing followed by vacuum freeze-drying is the most successful salvage method and should be used whenever possible.

Preservation will make arrangements to freeze materials containing coated papers immediately whenever possible. Ideally freezing should take place within 6-8 hours. If drying takes place at room temperature, pages will stick together. If material cannot be frozen in time to prevent drying, each glossy paper page should be interleaved with clean waxed paper or paper towels. If material cannot be frozen or interleaved immediately, wrap in plastic bags and store in a cool environment.

It is very important not to let coated paper dry before freezing or treatment by a conservator.

C. HANDLING SPECIFIC MEDIA

1. Bound Books and Periodicals

When moving and packing wet volumes, do not disturb the condition in which you find them. Do not try to close swollen volumes or flatten them. Water damage causes swelling; forcing a swollen book closed could break the spine. Do not try to clean volumes or squeeze out water.

+ If you encounter *moldy* items, see the instructions in Section III.A., Specific Media Instructions, above.

+ If you encounter *coated paper* items, see the instructions in Section III.B., Specific Media Instructions. above.

Volumes thoroughly soaked:

If there are only a few, and if the paper is not brittle or coated, they may be air dried as described below in "Volumes wet around the edges".

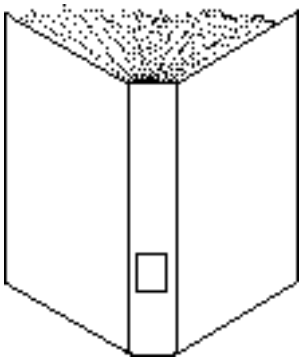
If there are large numbers, if the paper is brittle, or if the paper is coated, they must be frozen and subsequently freeze-dried by a professional contractor. To prepare and pack volumes for freezing, follow these procedures (yourself, or if supervising contractors, make sure the packing team follows them):

- Handle volumes as little as possible.
- Do not disturb the condition of the volumes.
- Wrap a sheet of blank newsprint, freezer paper, wax paper, or paper towel around the spine of each book. It is not necessary to wrap books carefully, the paper is functioning as a barrier against volumes sticking together. Only make sure that the paper wrapper is at least the full height of the book and covers both book boards.
- Pack books in cardboard "banker's boxes" or plastic milk crates; books should be placed SPINE DOWN, ONE LAYER ONLY.
- Do not pack tightly, but make sure volumes are supported. Stuff partially-full boxes with crumpled newsprint if necessary to support books so that their weight is directly on the spine.
- Large books that do not fit in the boxes on their spines may be laid flat in the bottom of the box. Avoid stacking large books on top of smaller ones.
- Identify each box with sequentially numbered labels.

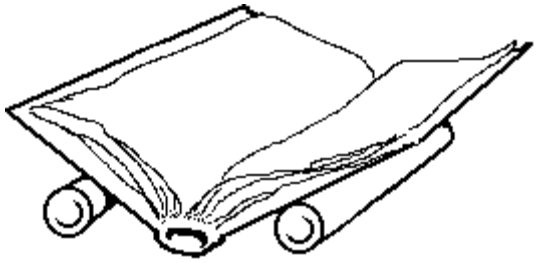
- Maintain a log of call numbers (or, if uncataloged, authors and titles) for the volumes in each numbered carton. Call numbers or author/titles may be written down or read into a cassette tape recorder and transcribed at a later time. (Software may be used to sort transcribed data, e.g., into shelflist order, at a later time.)
- After boxes are packed, place on pallets if available. DO NOT STACK MORE THAN 3 LAYERS HIGH or the bottom boxes and their contents will be crushed.
- If materials are being shipped to a freezer facility more than a few hours away, arrange with the salvage vendor for a refrigerated truck. Mold will begin to grow after 48 hours if materials are not kept cold.

Volumes wet around the edges:

These can be dried on site in the recovery work area. Open volumes carefully, interleave with paper towels or clean newsprint every 5-10 pages or where water has seeped in. Interleaving should extend beyond the edges of the text block, except at the edge on which the volume is standing. **Coated stock must have every wet page isolated from the next (see Section III.B., Specific Media Instructions, above)**. Interleave coated stock at every wet/damp page. Stand volume on its end with pages slightly fanned out. Volumes should be stood on the drier end. Support heavy covers with folded wedges of paper toweling or cardboard. Set up fans in the area to accelerate drying and retard mold growth. Fans should be directed up to keep air moving in the space, not to blow directly at the materials.



Volumes should be stood on their drier end.



Support heavy covers with folded or rolled wedges of newsprint or cardboard.

Volumes slightly damp:

- Recovery will depend on environment. Separate them and identify as damp.
- If humidity is uncontrollably high, or if there are many damp volumes, freeze (see above).
- If humidity is low or can be brought down promptly, and if there are a manageable number of damp volumes, air-dry (see above for "volumes wet around edges.")

2. Manuscripts, Archives, and other loose paper

+ If you encounter *moldy* items, see the instructions in Section III.A., Specific Media Instructions, above.

+ If you encounter *coated paper* items, see the instructions in Section III.B., Specific Media Instructions, above.

Manuscripts and archives thoroughly soaked:

- Very wet paper-based manuscripts or other loose paper items may be frozen in their boxes and/or folders. Pack document boxes or folders into cartons for freezing. Generally no further interleaving is necessary. Do not attempt to separate very wet documents from one another.
- Freezing will usually be safer than air-drying for very wet archives; soluble inks and other media are likely to feather unless the speed of drying is closely controlled. Typescripts or printed documents can be frozen with very little risk.
- If **photographs** are present within these collections, freezing may cause some damage to the emulsion layer. The importance of any photographic materials should be weighed against the survival of the larger collection. Air drying is the preferred method for photographs, but if this is not feasible, they may be frozen (see Section III.C.5. below "Photographic Media").

- **Parchment or vellum manuscripts**, particularly those with illuminations, should not be frozen except as a last resort. Send immediately to Conservation for treatment. If necessary, freeze, but do not freeze-dry. Keep frozen until Conservation can provide treatment.

Manuscripts and archives damp or wet around the edges:

- Damp archival material may be air-dried by separating the individual documents and spreading them on a table covered with paper towels or other absorbent material. Change the towels as they absorb moisture. If the objects are not too fragile, they may also be dried by hanging them on a clothesline.
- Discard damp or distorted document boxes and replace with new ones after contents are dry.

3. Architectural Drawings and Other Large Items

+ If you encounter *moldy* items, see the instructions in Section III.A., Specific Media Instructions, above.

+ If you encounter *coated paper* items, see the instructions in Section III.B., Specific Media Instructions, above.

Maps, plans, architectural drawings :

- If thoroughly soaked, pack for freezing. If drawings are stored flat in map cases, use drawers as transport and freezing containers.
- Wrap rolled drawings in plastic sheeting and lay them **in a single layer** in a shallow, flat container such as large commercial bread trays. Freeze within 48 hours. Damp objects may be air-dried if space and manpower permits.
- Plans or drawings on starch-coated fabric supports should be treated like coated paper. Separation will only be possible while the material is still wet. If the starchy image layer is sticking or peeling wrap the rolled drawing(s) in plastic sheeting and freeze immediately.
- Plans or drawings on mylar are often water-sensitive. Do not touch or blot the image layer, it may smear and/or wipe away.

- Damp material may be air-dried by separating the individual items and spreading them face up on a table covered with paper towels or other absorbent material. Change the towels as they absorb moisture. If the objects are not too fragile, they may also be dried by hanging them on a clothesline.
- Discard damp or distorted document boxes and replace with new ones after contents are dry.

4. Artworks

+ If you encounter *moldy* items, see the instructions in Section III.A., Specific Media Instructions, above.

+ If you encounter *coated paper* items, see the instructions in Section III.B., Specific Media Instructions, above.

Works of art on paper:

- Prints and drawings with stable media (e.g. printer's ink, most graphite) can be frozen or air-dried. Do not try to separate very wet stacks of paper. Instead, interleave where possible with dry folder stock or paper and freeze.
- Soluble media such as watercolors, gouache, pastel, felt tip pen etc. should be sent to Conservation immediately for individual attention. If this is not possible, pack and freeze immediately. Insert interleaving only where it is safe to do so. Do not blot surfaces of art works, and do not attempt to separate pieces if they are very wet. Consult Conservation staff if you are not sure what to do.
- Framed objects should be unframed if possible and air-dried or frozen. **BUT** if media are sticking or transferring to the glass, leave as is and freeze or air-dry frame and all.

Paintings:

- Paintings on canvas should be air-dried. Drain off excess water and carry horizontally, face up, to a drying area. Do not touch paint layer.

5. Photographic Media (microfilm, motion picture film, photographic negatives, photographic prints, slides, transparencies, etc.)

+ If you encounter *moldy* items, see the instructions in Section III.A., Specific Media Instructions, above.

Freezing is usually not the best idea for photographic media. It should only be considered in consultation with an expert.

- **Identify** the kinds of photographic materials that are endangered.
- **Prioritize** recovery actions based on the types of media involved.

In general, films (plastic-base materials such as negatives, transparencies, microformats, etc.) are more stable than prints (paper-base materials); therefore, *prints should usually be salvaged first*. Important exceptions include *deteriorated* nitrate and safety films, which are extremely susceptible to water damage.

Photographic media made by the following processes should be salvaged first**:**

ambrotypes, tintypes, collodion wet plate negatives, gelatin dry plate negatives, lantern slides, autochromes, carbon prints, woodburytypes, deteriorated or unhardened gelatin prints, and color materials. Photographs made by many of these processes will not survive immersion.

Photographic media that are more stable in water include:

daguerreotypes, salted paper prints, albumen prints, collodion prints, platinum prints, cyanotypes.

- **Photographs**

Most prints, negatives and color slides can be air-dried. The emulsion (picture or image) side should be face up. Avoid touching the emulsion surface of wet or damp photographic prints or negatives. (The emulsion side often appears less glossy on negatives and color slides.)

If the photographs or negatives are stuck together or the emulsion is damaged, do not try to separate them. Contact Conservation.

If photographic materials are covered with mud or dirt and are still wet, they may be gently rinsed in a bucket of cold, clean water, or a light stream of cold water, and then dried. Contact Conservation before trying this.

If freezing is necessary, Interleave or wrap individual photographs or groups of photographs before freezing with a non-woven polyester material or wax paper. This will make them easier to separate when they are eventually treated.

Prints (paper media)

Do not leave prints submerged in water. Water will quickly cause the image to deteriorate.

- Separate prints from their enclosures, frames, and from each other. If they are stuck together or adhered to glass, set them aside for consultation with a conservator.
- Allow excess water to drain off the prints.
- Spread the prints out to dry, face up, laying them flat on absorbent material such as blotters, unprinted newsprint, paper towels, or clean cloth. Prints may curl during drying. They can be flattened later.
- Keep the air around the drying materials moving at all times. Fans will speed up the drying process and minimize the risk of mold growth. Fans should be directed upward to keep air moving, not directly at the materials.

Photographic Film (Negatives, Transparencies)

- Dry negatives and transparencies vertically. Hang them on a line with plastic clips placed at the edges.
- Keep the air around the drying materials moving at all times. Fans will speed up the drying process and minimize the risk of mold growth. Fans should be directed upward to keep air moving, not directly at the materials.

Slides

- If slides are mounted between glass, they must be removed from the glass or they will not dry.
- Rinse slides in a water/Photo-flo mixture, slide cleaner, or a similar commercial product. Contact Preservation (4-1336) for details.
- Air-dry the slides, preferably by hanging them from a line. Alternatively, prop them up on one edge.

- If time permits, remove paper/cardboard slides frames for drying. Keep the frame with the slide if it contains information. The slides can be remounted.

■ **Microforms and Motion Picture Film**

Salvageable items will need to be processed in a lab within 3-4 days. They should be kept wet until that time. Do not get reels or fiche wetter than they already are. Instead, place them in a plastic bag or plastic wrap to maintain their state of wetness. Truly waterlogged film should be transferred to plastic containers filled with clean, cold water. Contact Preservation (4-1336) for professional drying.

6. Phonograph Disks (LPs)

+ If you encounter moldy items, see the instructions in Section III.A., Specific Media Instructions, above.

Disks that are wet:

- Remove disks from sleeves and liners.
- Pack vertically in crates with padded interleaving.
- Remove surface deposits by rinsing disks in distilled water. Wash shellac, acetate, and vinyl disks separately. Contact Conservation (4-3580) for details before starting.
- Encourage the materials to air dry as quickly as possible.
- Follow applicable procedures for drying the associated paper materials.

7. Optical and Magnetic Media

■ **Computer disks, CDs, DVDs, Laserdisks**

Determine salvage and treatment priorities. Is the content on the media essential, important, or derivative/backup for information available elsewhere and not involved in the disaster? If the media hold only duplicative or derivative content, discard the media rather than attempting salvage.

Damaged/dirty disks can cause hardware failure! Check with LITO personnel to determine appropriate equipment for recovery.

Disks that are only slightly wet and are not visibly dirty:

- If there is a significant amount of paper-based material within the case, remove the paper.
- Stand disks vertically to allow water to drain from cases. Encourage the materials to air dry as quickly as possible by using fans to circulate the air around them.
- Use a soft, absorbent cloth to remove as much moisture and light dirt/dust by gently wiping with a soft brush or dry lens tissue. DO NOT use anything treated with Endust or other chemicals. Wipe from center out to edges in a straight line like the spokes of a wagon wheel to minimize damage associated with scratching along the grain of the media.
- Follow applicable procedures for drying associated paper materials and paper cases.
- When dry, disks should be copied onto new media. Check with LITO personnel to determine appropriate method for recovery and equipment to use.

Disks that are saturated, submerged, or dirty and cannot simply be discarded:

- Check with LITO personnel first to determine appropriate method for recovery and equipment to use. There is a risk of serious damage to hardware if improperly or insufficiently cleaned disks are inserted.
- If there is a significant amount of paper-based material within the case, remove the paper component.
- Stand disks vertically to allow water to drain from cases. Encourage the materials to air dry as quickly as possible by using fans to circulate the air around them.
- Floppy disks may need to be removed from the plastic sleeve.
- Rinse disks in distilled water.
- Use a soft, absorbent cloth to remove as much moisture and light dirt/dust by gently wiping with a soft brush or dry lens tissue. DO NOT use anything treated with Endust or other chemicals. Wipe from center out to edges in a straight line like the spokes of a wagon wheel to minimize damage associated with scratching along the grain of the media.
- Suspend vertically and allow disks to air dry.
- It may be possible to remove heavier deposits of dirt by wiping disks with lens tissue dampened by a small amount of lens cleaner solution. Again, wipe disks from center out to edges in a straight line.
- When dry, disks should be copied onto new media.
- To copy a floppy disk that has been removed from the sleeve, cut open an undamaged disk by trimming 1/16" of the write-protect edge with paper cutter, remove new disk and place damaged disk into the empty sleeve.
- Follow applicable procedures for drying associated paper materials and paper cases.

■ **Audiotapes, Videotapes, Computer tapes**

Many tape formulations involve active metal particles, and oxidation is a serious concern. Do not attempt to spool or wind wet tape. Increased tension or surface contact can compromise the integrity of the media. Use only distilled water to rinse tapes - chlorine in tap water severely damages tape.

Tapes that are only slightly wet and not visibly dirty (brief, surface exposure to water):

- Remove tapes from cases/boxes.
- Suspend vertically, being wary of any exposed media. Do not unwind the tapes.
- Encourage the materials to air dry as quickly as possible.
- Remove light dirt/dust by gently wiping with a soft brush or lint-free pad. DO NOT use anything treated with Endust or other chemicals.
- Follow applicable procedures for drying associated paper materials and paper cases.

Tapes that are saturated, submerged, or dirty:

- Remove tapes from cases/boxes.
- Rinse tapes briefly in distilled water to remove sediment, etc. Do not unwind the tapes.
- Pack tapes in containers of distilled water, and keep them submerged until conservation treatment can occur.
- Follow applicable procedures for drying associated paper materials and paper cases.

(For motion picture film, see Section III.C.6. above on Photographic Media)

8. Electronic Equipment

Call the Library Information Technology Office (854-4969) to deal with wet equipment. Also see Appendix D: LITO Malfunction Reporting Procedures.

If water is leaking onto or has reached electrical wiring: **DO NOT ATTEMPT TO TURN OFF EQUIPMENT!** If the floor is covered with water, do not enter the space. Wait for Facilities or Health & Safety to shut down power if necessary and remove water. Personal safety comes first!

If there is no immediate threat to personal safety:

- **Wet equipment** -- DO NOT handle wet equipment that is still turned on. DO NOT turn on equipment that might be wet. Wet equipment that has been turned off can be positioned to let water drain out. If possible, elevate any equipment resting on the floor, including power strips. Cover loosely with plastic drop cloths if necessary to protect from further leaks.
  - Once the immediate emergency is over, wet equipment should be air-dried as quickly as possible. Backup critical data before performing equipment testing/operation.
- **Dry equipment --** Copy critical data to external storage media, then remove the storage media to a controlled environment. Shut down, turn off, and unplug the equipment. If there is water on the floor, it may be safest to use the eraser end of a pencil to guard against possible shocks. If possible, elevate any equipment resting on the floor, including power strips. Cover loosely with plastic drop cloths if necessary to protect from leaks.

IV. PRE-DISASTER PLANNING: Are you prepared?

1. Appoint a disaster coordinator who will order supplies, update contact persons, etc.
    - Inform Preservation when a replacement coordinator is appointed.

2. Keep your emergency contact list up to date (see Worksheet A).
    - It must include names and telephone numbers.
    - It should be updated regularly in October and April of every year, and whenever significant staff changes occur.
    - Send all revisions to Preservation.

3. Keep your inventory of disaster supplies up to date (see Worksheet B).
    - Each library should have the following items on hand:
        - plastic dropcloths--to cover tables, divert water and cover ranges which may be in a risk area.
        - paper towels (roll or sheets)
        - duct tape for securing dropcloths
        - safety goggles and disposable gloves for handling material that may cause skin or respiratory irritation
    - Other items not part of the standard supplies, but which a unit may want to have, are:
        - buckets
        - fans and extension cords--to keep air circulating
    - To replenish supplies after each disaster, complete Worksheet B and send to Conservation.

4. Prepare a Unit Priority Statement (see Worksheet C).
    - The unit's collections and records should be evaluated and priority should be assigned to important parts of the collection and of unit records. This will allow quick attention to the most important materials.
    - Review your disaster priority plan after any significant shifts or new acquisitions, or at least annually.
    - Send all revisions to Preservation.

5. Prepare a set of annotated floor plans of the unit's collection (see Worksheet D).
    - Note the location of
        - high priority collections/records
        - fire exits
        - fire extinguishers
        - fuse/electrical control boxes
        - sprinkler systems
        - locations of chronic leaks, etc.
    - Review your floor plans after any significant shifts or renovations, or at least annually.
    - Send all revisions to Preservation.

6. Security and safety.
    - Keep exit routes clear.
    - Check that Fire alarm equipment and exit lights are working.
    - Review emergency exit routes, location of fire alarms, and emergency procedures with all staff at least annually and include this information in orientations for all new staff, including GAs.
    - Make sure all doors lock and unlock as they are supposed to so that no one unauthorized can get in but everyone can get out at need.
    - Invite the Fire Safety Officer periodically to speak to all library personnel regarding fire emergencies.

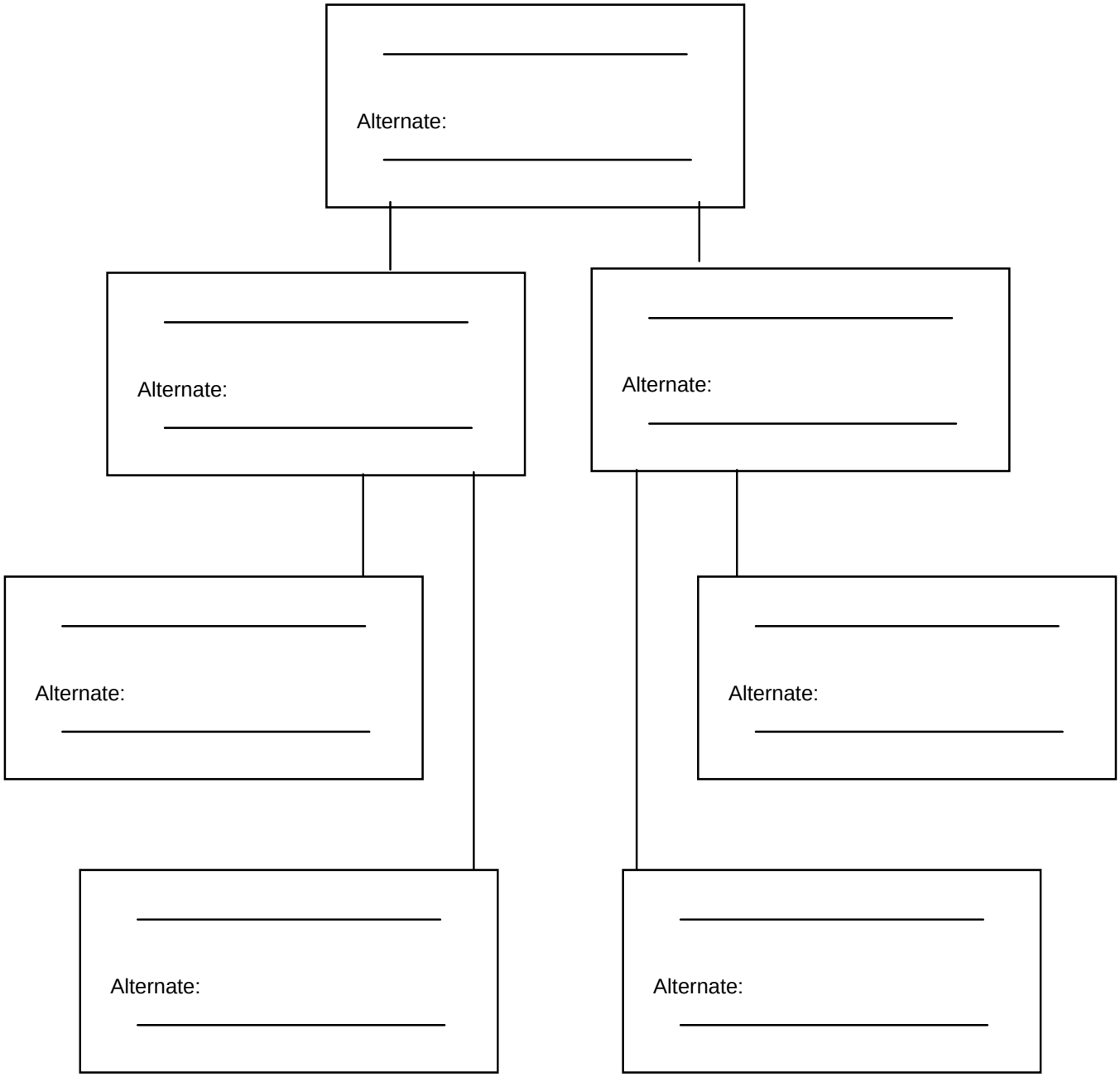
7. Reduce potential disaster risks
    - Fire risk
        - Check for frayed wiring and over-loaded plugs;
        - Make sure coffee pots, labeling irons, portable heaters, etc are turned off every evening;
        - Arrange for a walk-through and review of your space by the Fire Safety Officer at least once a year. Ask for advice on potential danger spots and the installation of proper extinguishers, appropriate signs, and emergency lighting in your unit.
    - Water risk
        - Keep a routine eye on any known previous leaks, on pipes, and areas under restrooms and other sources of water.
        - Have Facilities repair any windows with broken/cracked panes.
        - Have Facilities clean drains and gutters regularly.
        - Report small leaks to Facilities immediately and follow up to get them fixed.
        - Do not store books or other library materials directly on the floor – if they must be on the floor, put them on pallets or other appropriate objects to keep them several inches off the floor.
        - Store Microfilm/fiche containers away from water pipes and off the lowest shelf to minimize the effects of leaks. Microforms are highly susceptible to water damage.

8. Document problems
    - Document all reports of leaks and other maintenance problems to Facilities and all correspondence about getting them fixed (copies of email, written memos, etc).
    - Report all leaks and other disasters to Risk Management even if no library materials are damaged. the paper form (see Worksheet F) or online version (http://www.columbia.edu/cu/controller/rm_forms.htm). Enter the phrase "Incident report only" in the section where property damage is described.
    - If you have previously reported a leak or other problem to Facilities (and can document it), Risk Management may be able to charge Facilities for the deductible that the Library will otherwise have to pay. See Section II.C., Financial Issues, for further details on insurance and Risk Management.

Worksheet A: Emergency Contact List

Library: _____

Please put name of the department or unit in blank at top. List names and home phone numbers for primary contacts and alternates. This list should be reviewed regularly and updated.
Send to Conservation Lab, Butler 109.



This page last updated: _____

AVAILABLE LIBRARY STAFF

If help is needed in disaster recovery, consult the list below (maintained by your unit) of those available to help out in an emergency.

DAY SHIFT:

NIGHT SHIFT:

This page last updated: _____

Worksheet B: Disaster Supply Item Request Form

To: **Conservation Lab, 109 Butler** Date: _____

From: _____, Disaster Coordinator, ext._____
(name)

Subject: Copies of Disaster Plan and Inventory of Supplies

_____Copies of Disaster Plan needed for _____.
(library)

INVENTORY

The minimum supplies for each area is the following:

	HAVE	NEED
12 plastic drop cloths		
6 rolls paper towels or blank newsprint		
6 pairs rubber gloves		
6 dust masks		
zippy cutter		
flashlight		
other items you have:		NA

All Disaster Supply Centers (Avery, Lehman, Engineering, HSL and the Annex) should have the above and in addition the following items:

	HAVE	NEED
1 convertible handtruck		
strapping tape & dispenser		
extension cords (at least 2)		
3-prong outlet adapters		
Fans (at least 1)		
wet vacuum		
2 red plastic buckets		
sponges		
collapsible plastic milk crate		
2 flashlights		
6 pairs rubber gloves		
6 dust masks		
galoshes		

Worksheet C: Unit Priority Statement

Library: _____

The unit's collections and records should be evaluated and priority should be assigned to the various elements of the collection. This will allow the relative importance of parts of the collection to be considered during disaster recovery. Please list locations and indicate on floorplan. Give rationale for priority assignment

Send to Conservation Lab, 109 Butler.

FIRST PRIORITY:

SECOND PRIORITY:

THIRD PRIORITY:

This page last updated: _____

Worksheet D: Floorplan

Each unit should prepare two sets of annotated floor plans of the unit's layout; one set to be filed with the unit's Disaster Response Manual, the other sent to Preservation. These floorplans should reflect the following:

- high priority collections / records (per the Unit Priority Statement [see worksheet C])
- fire exits
- fire extinguishers
- fuse / circuit breaker boxes
- sprinkler systems
- locations of chronic leaks

To be effective, floorplans must be updated whenever there are changes in affected units.

Worksheet E: Post Disaster Report

Please photocopy this form and fill it out after *any* disaster at your library. Even minor incidents should be reported. **Send to Conservation Lab, 109 Butler.**

DATE: _____ LIBRARY: _____

AREA(S) OF LIBRARY AFFECTED: Floor/level: _____

Room number/range numbers: _____

TYPE OF DISASTER: OWater OFire O Other

If other, please describe: _____

SOURCE OF PROBLEM:

FIRE:	OElectrical	WATER:	OPipes	ORoof
	OWaste Paper		ODrains	OOther
	OOther		OSink/toilet	

If other, please describe: _____

TYPE OF MATERIALS AND NUMBER OF EACH AFFECTED

OBooks |____| OMicrofilms |____| ODrawings |____|

OManuscripts |____| OAudiovisual |____| OSoftware |____|

OOther |____| If other, please describe:_____

DESCRIPTION OF DAMAGE (and number of items destroyed/severely damaged, if known):

NUMBER OF DEPARTMENT STAFF HOURS USED IN DISASTER RESPONSE: _____

COMMENTS: *(Please describe any major or unanticipated problems encountered during the disaster or recovery; any difficulties in contacting people or getting clean-up/recovery assistance; difficulties in locating supplies; any problems or omissions noted in the Disaster Plan.)*

Worksheet F: Risk Management

Property Loss Claim Report Form

Fill in the Property Loss/Damage Claim Reporting form at
http://finance.columbia.edu/forms/index.html
(Scroll down to Risk Management Section)
Also print out a copy and send it to Preservation.

Appendix B: Disaster Supply Center List

LIBRARY/UNIT	SUPPLY CENTER and CONTACT PERSON
Burke Butler……>** Journalism Milstein Music Rare Books Reference	Preservation, 4-5757, 4-1336; or Conservation Lab, 4-3580, 4-8081
Art Properties……>** Business Columbiana East Asian Library Avery	Avery Library, 4-6199, ask for supervisor on duty
Law ……>** Lehman Social Work	Lehman Library, 4-4170; ask for supervisor on duty
Engineering ……>** Geology Geo-Science Mathematics	Engineering Library, 4-3353; ask for supervisor on duty

Each Center should have:

- Collapsible milk crates (2)
- Dust masks
- Extension cords (minimum 3 or 4 heavy duty, not frayed)
- Fans
- Flashlights
- Galoshes
- Hand truck (1)
- Paper towels
- Plastic buckets with handles (2)
- Plastic dropcloths
- Safety goggles
- Sponges
- Strapping tape and dispenser (3-4 medium size rolls)
- Surgical gloves
- Three-prong outlet adapters (one for each cord)
- Wet vacuum (1)
- Zippy cutters or scissors (1)

Appendix C: Vendor List of Salvage Services and Disaster Supplies

Procedure for contacting salvage vendors:

Preservation , Library Administration, and/or Risk Management will make any arrangements for contracting any outside services.

Sources for salvage services:

Dehumidification Services

Munter's Water Damage Recovery Services
(Mike Conlon – New York rep)
16 Hunt Road
Amesbury, MA 01913
(973) 334-7442 or (800) 422-6379

AIRDEX
1003 Wirt Rd, #107
Houston, TX 77055
(713) 963-8600

Blackmon-Mooring-Stematic
Catastrophe, Inc. (BMS CAT)
303 Arthur St.
Fort Worth, TX 76107
(800) 433-2940

CARGOCAIRE Engineering Co.
9 Monroe St.
PO Box 6407
Amesbury, MA 01913
(508) 388-0600

Freezer Storage Space / Refrigerated Truck:

Armel Warehouse
230 Moose St.
Brooklyn, NY 11206
(718) 497-4700)

Freeze-Dry Services:

Small Scale (less than 40 cubic ft.) Contact CUL Conservation Lab: 854-3580

Large Scale (more than 40 cubic ft.)

Munter's Water Damage Recovery Services
(Mike Conlon – New York rep)
16 Hunt Road
Amesbury, MA 01913
(973) 334-7442 or (800) 422-6379

American Freeze-Dry, Inc.
411 White Horse Pike
Audubon, NJ 08106
(609) 546-0777

Document Reprocessors
41 Sutter Street, Suite 1120
San Francisco, CA 94104
(415) 362-1290

McDonnell Aircraft Co.
Box 516
St. Louis, MO
(314) 232-0232

Microfilm Salvage:

Eastman Kodak Company
Disaster Recovery Laboratory
700 Dewey Avenue
B-65, Door G, Room 340
Attention: Howard Schwartz
Rochester, NY 14650-1819
Toll Free: 800-EKC-TEST (352-8378)
Telephone: (716) 253-3907

Kodak will reprocess original camera films (only Kodak brand) free of charge. There is no limit on the number of rolls. Films should be packaged according to Kodak's instructions which are given when Kodak is notified.

New England Micrographics
750 E. Industrial Park Drive
Manchester, NH 03109
Telephone: (603) 625-1171
Fax: (603) 625-2515

New England Micrographics can reprocess any amount of water-damaged microfilm, and also provides off-site storage for microfilm and computer media. Cost is based on the size and nature of the request. They will work with Fuji film and also Ilford color film.

Salvage of Video and Audiotapes:

Spec Brothers
P.O. Box 5
Ridgefield Park, NJ 07660
(800) 852-7732
Fax: (201) 440-6588

Vidipax
450 West 31st St., 4th floor
New York, NY 10001
(212) 563-1999
Fax: (212) 563-1994

Procedures for obtaining disaster supplies:

If campus resources (Disaster Supply Centers, Preservation, Supply Room, Central Stores, Facilities) cannot provide supplies, materials may be purchased from suppliers listed below.

During normal office hours (Monday-Friday, 9 am-5 pm), contact Financial Services office (x4-3824) in Butler to make purchasing arrangements.

During evening and weekend hours and on holidays, contact neighborhood vendors first (e.g., Academy Hardware, Columbia Hardware, West End Hardware.) With written authorization signed by a unit head, a staff member can pick up the needed items. The supplier should be asked to bill Columbia University Libraries. If the supplier refuses to bill Columbia, a staff member may pay for (or charge) the cost of the materials and receive reimbursement from the University.

Sources for disaster supplies:

Many ordinary emergency/disaster recovery supplies such as **cheese cloth, wax or freezer paper, extension cords, flashlights (waterproof), batteries, galoshes, plastic buckets, sponges, duct or gaffer tape, three-prong outlets** can be found at the following local hardware stores:

Academy Hardware Inc.	Columbia Hardware Co.	West End Hardware Supply
2869 Broadway	2905 Broadway	353 W. 48th Street
New York, NY 10025	New York, NY 10025	New York, NY 10036
(212) 222-3060	(212) 662-2150	(212) 757-0528
Cardboard cartons	**Type: "Paige" folding**	

Canover Paper Products, Inc.
38 St. & Maspeth Ave.
Maspeth, NY 11378
(718) 456-8900

Passay Shipping
547 West 20th Street
New York, NY
(212) 989-2940

Queens Papers Co.
227-11 Linden Blvd.
Cambria Heights, NY 11411
(718) 723-1291

Harlem Paper Co.
515 Ruxton St.
Bronx, NY 10474
(718) 542-3883

Dehumidifiers **Type: Capacity to remove 40-50 pints in 24 hours. Capability of working below 65° F.**

American Home Center
425 3rd Ave.
New York, NY 10016
(212) 683-3616

Center Home Appliance
1148 St. Nicholas Ave.
New York, NY 10032
(212) 795-0828

Sears, Roebuck & Co.
151 Maywood Ave.
Contract Sales
Maywood, NJ 07607
(800) 526-0840

Fans

Warman Precision Products
893 Broadway (between 8th and 9th Aves.
New York, NY 10003
(212) 475-1700

Hand trucks **Type: convertible or dual-purpose**

Fidelity Products
P.O. Box 155
Minneapolis, MN 55440
(800) 328-3034

Standard Equipment Co.
3175 Fulton St.
Brooklyn, NY 11208
(718) 235-4440

Newsprint **Type: blank**

National Paper & Pkg
42nd Street
Brooklyn, NY
(718) 965-3700

TALAS
568 Broadway
New York, NY 10012
212-219-0770

(Can provide 20"x30" sheets in 20 lb. bundles, = 1600 sheets)

Wolf Paper & Twine
680 6th Ave.
New York, NY
(212) 675-4870

(Can provide 24"x36" sheets in 100 lb. bundles, = 2000 sheets)

Plastic buckets **Type: with handles**

Columbia Hardware Co.
(see address and phone above)

Warman Precision Products
(see under **Fans** above)

Plastic sheeting **Type: 1.0 mils.; 9' x 12'**

Acme Plastic Inc.
220 Browertown Road
West Patterson, NY 07424
(201) 256-6666

Ain Plastic Inc.
49 E. Sanford Blvd.
Mount Vernon, NY 10550
(914) 668-6800

Quick trims/zippy cutters

Sam Flax
55 East 55th St.
New York, NY 10022
(212) 620-3060

Wet vacuum **Type: 10 gal. capacity, 1.7 horsepower, steel industrial type; manufacturer, Dayton.**

W. W. Grainger, Inc.
58-45 Grand Ave.
Maspeth, NY 11378
(718) 326-1598

Appendix D: LITO Malfunction Reporting Procedures

What these Procedures Cover

- all CUL systems and computer equipment, including PCs, terminals, printers and other peripherals
- applies only to systems and services that previously worked correctly and have subsequently broken or malfunctioned

Submit requests for new hardware, software, reconfiguration, enhancements, functionality, etc. to the Library Systems Office (LITO) via the Division Director on a Request for New Service Form.

http://www.columbia.edu/cu/libraries/inside/lso/helpdesk/malfunction.html

Procedures

I. **Urgent Problems on Weekdays**
   A. Make sure that all documented troubleshooting procedures have been followed *BEFORE* reporting the problem.
      - CLIO Troubleshooting Procedures
      - Other Troubleshooting Procedures [to come]
   B. Report an urgent problem to the LSO Help Desk at 854-4969.
   C. Also report the problem using the Problem Reporting Form, to ensure that the problem is recorded and tracked.

II. **Urgent Problems on Evenings & Weekends**
   A. Make sure that all documented troubleshooting procedures have been followed *BEFORE* reporting the problem.
      - CLIO Troubleshooting Procedures
      - Other Troubleshooting Procedures [to come]
   B. After 5:00 p.m. on Monday through Friday, and on weekends & holidays, if you call the LITO Help Desk, your call will be forwarded to a Pagemail Pager.
   C. Between 12:00 midnight and 8:00 a.m. there is no support for problems, not even via Pagemail. If a problem occurs during these hours, report it after 8:00 a.m.
   D. Reporting Problems to Pagemail
      Pagemail is similar to a telephone answering service; it will instruct you to leave a voice message. Your call will be returned by an LITO staff person as soon as possible.
      1. Dial the phone number of the LITO Help Desk: 854-4969.
      2. You will hear a 15-second recorded announcement.
      3. After the tone, you will have *30 seconds* in which to say the following:
         - your name
         - your location (building and room number)
         - your phone number
         - the terminal ID, if applicable
         - a description of the problem
      4. As soon as you hang up:
         a. The Pagemail system will "beep" the Pager.
            NOTE: Even if you do not leave a message, the Pagemail system will still "beep" the Pager.

   b. The staff person monitoring the Pager will dial in to hear your message and will then contact you directly by phone.
5. If no response *AFTER 15 MINUTES*, call the LSO Help Desk again and repeat the steps above.
6. If no response *AFTER ANOTHER 15 MINUTES*, call the Pager directly: **917-356-8134**
7. If no response *AFTER ANOTHER 15 MINUTES*, call an LSO staff person at home.

Phone Numbers

Call the home phone numbers of LITO staff for urgent problems on evenings and weekends *ONLY IF THERE IS NO RESPONSE* to any of the following phone numbers:

Library Information Technology Office	(212) 854-7617
LITO Help Desk	(212) 854-4969
Pagemail Pager	(917) 356-8134