

OUTLINE OF GENERIC DISASTER PLAN

- I. Disaster Prevention Checklist
 - A. Disaster Prevention and Preparedness Guidelines
 - B. Housekeeping
 - C. Hazards Survey
 - D. Building Safety Checklist
- II. Disaster Response
 - A. Emergency Contact List
 - B. Procedures
 - C. Security, Psychology, P.R.
- III. Disaster Recovery
 - A. Restoration Methods
 - B. Recovery and Completion

INLAND EMPIRE LIBRARIES DISASTER NETWORK RESPONSE

GENERIC DISASTER PLAN

I. Disaster Prevention Guidelines:

- A. Keep the Disaster Plan available at all appropriate locations. Make sure the staff is familiar with its layouts and contents.
- B. Identify and inspect several times a year all areas and equipment which may cause or be subject to a disaster.
- C. Update the supply inventory at least twice a year, noting in particular the supplies on hand and those which would have to be purchased in an emergency.
- D. Review the Disaster Plan regularly, updating as necessary any of the following:
 1. Names, addresses, and telephone numbers as necessary of any personnel, consultants, services, etc.
 2. Names of personnel assigned specific titles, such as Fire Warden, Recovery Director, or Evacuation Administrator.
 3. Emergency procedures.
 4. Location of supply rooms and local stores.
 5. The disaster plans of branch libraries.
 6. Floor plans.
 7. Insurance coverage and physical inventory.
 8. List of past disasters.

II. Housekeeping Guidelines:

- A. Ensure that internal fire doors are kept closed.

- B. Ensure that emergency equipment (e.g. fire hoses, fire extinguishers, first-aid kits, rescue equipment) is always accessible and in good working order. Do not, under any circumstances, place furniture, display cases, coat--racks, etc... in front of a fire-hose cabinet, fire extinguisher, or manual box fire alarm system.
- C. Close drawers of storage cabinets when not in use.
- D. Do not leave exposed any materials, especially original documents or other archival material, on desks or tables overnight.
- E. Maintain a stable climatic environment in the library.
- F. Identify and store cellulose nitrate-based film safely apart from the rest of the collection and have it copied at the earliest opportunity. In addition to its high combustibility, cellulose nitrate slowly decomposes under normal storage conditions, releasing gases harmful to collection materials, especially paper and film.
- G. Store valuable material in fire-proof and dust-proof cabinets, preferably made of steel and treated with a non-corrosive, non-staining, and non-combustible paint.
- H. Ensure that books are not shelved too tightly. This measure not only prevents user damage to the bindings when books are pulled off the shelves, but also ensures that, if flooding occurs, the water will not cause the books to swell to the point where they burst from their shelving units. This applies to a lesser degree to other materials.
- I. Shelf materials so that they are set back a short distance from the edge. This precaution prevents user wear, the vertical spread of fire from one shelf to another, and books "walking off" shelves during minor earthquakes.
- J. Prohibit eating and drinking to a designated area within the building, certainly not in the stacks, and preferably not near them.

- K. Ensure than appropriate standards (e.g. dust control and supplies storage) are established and met by janitorial staff. Doors may be weather-stripped to minimize entry of dust and insects.

III. Hazards Survey:

Check any hazards identified on a regular basis. The person in the organization in charge of facilities should be able to assist you in answering many of these questions.

A. Climate:

1. Is your area subject to extremes or to sudden changes in temperature and relative humidity?

2. How soon after failure of your heating or cooling system will the climate in your building reach unacceptable levels?

3. Which materials in your collections are most sensitive to the extremes and fluctuations in temperatures and relative humidity? Please list:

4. Is your area subject to heavy or prolonged snow or rainfall? _____
5. Is your area subject to severe storms? _____

B. Topography:

1. Is your building situated by a lake, river or ocean?

2. Is the river tidal? _____
3. Is your basement below water level or water table level? _____

4. Is your building in an area prone to avalanches or landslides? _____

C. Seismic Stability: Is your area subject to earthquakes or volcanic action? _____

D. Building Structure:

1. What are the structural materials? Please list: _____

2. Has the building a flat roof, skylights, roof access doors or internal roof drains? Please list: _____

3. Are collections stored in a basement? _____

4. Are there visible cracks in the structure? Where: _____

Check b-d after any rain, snow melt or earthquake.

5. Are there water pipes running through collection areas? Where: _____

6. Are there signs of rot or termites? Where: _____

Make these a high priority for treatment and repair.

E. Hazardous Materials:

1. Are hazardous materials such as gas cylinders, solvents, paints, etc., stored in the building in

accordance with local regulations and safety standards? _____

2. Is staff trained in the correct handling of hazardous materials and equipment? _____

3. Have potential hazards such as poisonous chemicals been removed from collections? _____

F. Services:

1. Do you have a regular maintenance and inspection service for plumbing, electrical, fire detection, fire extinguishing and security systems? _____

2. Do you have up-to-date plans and drawings of all of the above, and are duplicates stored safely elsewhere? Date of last revision: _____

3. Do you know which services (e.g. heating and other fuel sources, electricity, water, sewer, telephones, etc.) for which you are responsible? Please list: _____

4. Have you up-to-date plans and drawings of their locations, including "turn-offs" and master switches? _____

5. Is there a back-up for these services? _____

6. Is your water pressure adequate for fighting fire? _____

IV. **Building Safety Checklist:** Please Record Date Checked

A. Locks secure & keys accounted for? _____

Burglary alarms secure & connected to security service? _____

B. Disaster manual and emergency phone numbers available at telephone operator's desk, reference desks, or other appropriate locations? **Use Checklist A.**

- C. Last building inspection by fire marshall or other appropriate authority? _____
1. Fire extinguishers. List locations and put on floor maps. **Use Checklist B.**
 2. Fire alarms operable & connected to monitoring service? _____
 3. Sprinkler systems operable? _____
 4. Smoke detectors operable? _____
 5. Emergency Exits functioning properly? _____
- D. Emergency lighting operable & available where needed? List locations and date checked: _____

- E. Transistor radio available & stocked, with spare batteries? List locations and date checked: _____

- F. First aid kits available & stocked? List locations and date checked: _____

- G. Staff familiarized, by tour, with locations of fire extinguishers, emergency lights, radio, civil defense/tornado shelter, first aid kits, & how to reach members of Disaster Action Team? _____
- H. Most recent fire drill? _____
- I. Most recent earthquake drill? _____
- J. Most recent tornado drill? _____
- K. Most recent check of:

1. Cut-off switches and valves:

(a) Electric _____

(b) Gas _____

(c) Water _____

(d) Sprinkler system (if separate) _____

2. Water detectors _____

3. Sump pump or portable pump _____

4. Flashlights, with replacement batteries _____

5. CB radios _____

6. Handi/Talkies _____

L. In-house emergency equipment and disaster supplies? **Use Checklist C.**

M. Clearly posted and updated emergency evacuation maps?

N. Other potentially unsafe or damaging conditions: [**Use a copy of this page for each area checked.**] Record Date
Checked

LOCATION: _____

1. Exits or corridors, aisles, or stairwells blocked?

2. Fire doors closed; alarms working properly? _____

3. Exit signs not visible? _____

4. Warped or sticking doors? _____

5. Dangerous chemicals or other materials improperly stored? _____
6. Ceiling or other leaks? _____
7. Plumbing okay? _____
8. Water stained ceilings indicating possible leaks?

9. Air conditioning units checked for leaks? _____
10. Worn exposed wiring? _____
11. Electrical equipment not grounded? _____
12. Overloaded sockets? _____
13. Electrical cords in dangerous position? _____
14. Other potential tripping hazard? _____
15. Books or boxes dangerously piled or stored on the floor? _____
16. Unsafe stacks (improperly balanced, braced, etc.)?

17. Other unsafe conditions? List: _____

CHECKLIST A

EMERGENCY TELEPHONE NUMBERS

It is the responsibility of the person first observing the disaster to call _____ and a member of the Disaster Team.

<u>Title</u>	<u>Name</u>	<u>Office Phone</u>	<u>Home Phone</u>
Security	_____	_____	_____
Building Mgr	_____	_____	_____
Disaster Team	[Call in order given until you reach someone.]		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
Library Dir	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

CHECKLIST B

FIRE EXTINGUISHERS

DRY-CHEMICAL FIRE EXTINGUISHERS

Dry-chemical extinguishers will smother any type of fire, including electrical and chemical, by coating the burning area with a layer of powder that cuts off the supply of oxygen.

INSPECTION CHECKLIST

<u>Location/Code Number</u> <u>Reported/Repaired</u>	<u>Date</u>	<u>Condition</u>		

CHECKLIST C

IN-HOUSE EMERGENCY EQUIPMENT AND DISASTER SUPPLIES

The following list provides examples of the types of materials which should be on hand in case of an emergency. A blanket worksheet is also provided.

<u>Equipment</u>	<u>Location</u>	<u>Amount</u>	<u>Date Checked</u>
Book Trucks			
Fans			
Walkie-Talkies			
Boots			
Flashlights			
Unprinted Newsprint			

Brooms	_____	_____	_____
Freezer Paper	_____	_____	_____
Vacuums	_____	_____	_____
Buckets	_____	_____	_____
Ladders	_____	_____	_____
Wax Paper	_____	_____	_____
Cardboard Boxes			
Size _____	_____	_____	_____
Size _____	_____	_____	_____
Mops	_____	_____	_____
Paper Towels	_____	_____	_____
Plastic Garbage Bags	_____	_____	_____
Disinfectant	_____	_____	_____
Plastic Milk Crates	_____	_____	_____
Duct Tape	_____	_____	_____
Plastic Sheeting	_____	_____	_____
Extension Cords	_____	_____	_____
Humidifier	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- A. Keep the Disaster Plan available at all appropriate locations. Make sure the staff is familiar with its layouts and contents.
- B. Identify and inspect several times a year all areas and equipment which may cause or be subject to a disaster.
- C. Update the supply inventory at least twice a year, noting in particular the supplies on hand and those which would have to be purchased in an emergency.
- D. Review the Disaster Plan regularly, updating as necessary any of the following:
 - 1. Names, addresses, and telephone numbers as necessary of any personnel, consultants, services, etc.
 - 2. Names of personnel assigned specific titles, such as Fire Warden, Recovery Director, or Evacuation Administrator.
 - 3. Emergency procedures.
 - 4. Location of supply rooms and local stores.
 - 5. The disaster plans of branch libraries.
 - 6. Floor plans.
 - 7. Insurance coverage and physical inventory.
 - 8. List of past disasters.

II. Housekeeping Guidelines:

- A. Ensure that internal fire doors are kept closed.
- B. Ensure that emergency equipment (e.g. fire hoses, fire extinguishers, first-aid kits, rescue equipment) is always accessible and in good working order. Do not, under any circumstances, place furniture, display cases, coat-racks, etc... in front of a fire-hose cabinet, fire extinguisher, or manual box fire alarm system.
- C. Close drawers of storage cabinets when not in use.

- D. Do not leave exposed any materials, especially original documents or other archival material, on desks or tables overnight.
- E. Maintain a stable climatic environment in the library.
- F. Identify and store cellulose nitrate-based film safely apart from the rest of the collection and have it copied at the earliest opportunity. In addition to its high combustibility, cellulose nitrate slowly decomposes under normal storage conditions, releasing gases harmful to collection materials, especially paper and film.
- G. Store valuable material in fire-proof and dust-proof cabinets, preferably made of steel and treated with a non-corrosive, non-staining, and non-combustible paint.
- H. Ensure that books are not shelved too tightly. This measure not only prevents user damage to the bindings when books are pulled off the shelves, but also ensures that, if flooding occurs, the water will not cause the books to swell to the point where they burst from their shelving units. This applies to a lesser degree to other materials.
- I. Shelf materials so that they are set back a short distance from the edge. This precaution prevents user wear, the vertical spread of fire from one shelf to another, and books "walking off" shelves during minor earthquakes.
- J. Prohibit eating and drinking to a designated area within the building, certainly not in the stacks, and preferably not near them.
- K. Ensure than appropriate standards (e.g. dust control and supplies storage) are established and met by janitorial staff. Doors may be weather-stripped to minimize entry of dust and insects.

III. Hazards Survey:

Check any hazards identified on a regular basis. The person in the organization in charge of facilities should be able to assist you in answering many of these questions.

A. Climate:

1. Is your area subject to extremes or to sudden changes in temperature and relative humidity?

2. How soon after failure of your heating or cooling system will the climate in your building reach unacceptable levels?

3. Which materials in your collections are most sensitive to the extremes and fluctuations in temperatures and relative humidity? Please list:

4. Is your area subject to heavy or prolonged snow or rainfall?

5. Is your area subject to severe storms? _____

B. Topography:

1. Is your building situated by a lake, river or ocean?

2. Is the river tidal? _____

3. Is your basement below water level or water table level?

4. Is your building in an area prone to avalanches or landslides?

C. Seismic Stability: Is your area subject to earthquakes or volcanic action? _____

D. Building Structure:

1. What are the structural materials? Please list:

2. Has the building a flat roof, skylights, roof access doors or internal roof drains? Please list:

3. Are collections stored in a basement? _____

4. Are there visible cracks in the structure? Where:

Check b-d after any rain, snow melt or earthquake.

5. Are there water pipes running through collection areas? Where:

6. Are there signs of rot or termites? Where:

Make these a high priority for treatment and repair.

E. Hazardous Materials:

1. Are hazardous materials such as gas cylinders, solvents, paints, etc., stored in the building in accordance with local regulations and safety standards?

2. Is staff trained in the correct handling of hazardous materials and equipment? _____

3. Have potential hazards such as poisonous chemicals been removed from collections? _____

F. Services:

1. Do you have a regular maintenance and inspection service for plumbing, electrical, fire detection, fire extinguishing and security systems? _____

2. Do you have up-to-date plans and drawings of all of the above, and are duplicates stored safely elsewhere? Date of last revision: _____
3. Do you know which services (e.g. heating and other fuel sources, electricity, water, sewer, telephones, etc.) for which you are responsible? Please list:

4. Have you up-to-date plans and drawings of their locations, including "turn-offs" and master switches?

5. Is there a back-up for these services? _____
6. Is your water pressure adequate for fighting fire?

IV. **Building Safety Checklist:** Please Record Date Checked

- A. Locks secure & keys accounted for? _____
Burglary alarms secure & connected to security service?

- B. Disaster manual and emergency phone numbers available at telephone operator's desk, reference desks, or other appropriate locations?
Use Checklist A.
- C. Last building inspection by fire marshall or other appropriate authority? _____
1. Fire extinguishers. List locations and put on floor maps. **Use Checklist B.**
2. Fire alarms operable & connected to monitoring service?

3. Sprinkler systems operable? _____
4. Smoke detectors operable? _____
5. Emergency Exits functioning properly? _____
- D. Emergency lighting operable & available where needed? List locations and date checked:

- E. Transistor radio available & stocked, with spare batteries? List locations and date checked: _____

- F. First aid kits available & stocked? List locations and date checked: _____

- G. Staff familiarized, by tour, with locations of fire extinguishers, emergency lights, radio, civil defense/tornado shelter, first aid

kits, & how to reach members of Disaster Action Team?

H. Most recent fire drill? _____

I. Most recent earthquake drill? _____

J. Most recent tornado drill? _____

K. Most recent check of:

1. Cut-off switches and valves:

(a) Electric _____

(b) Gas _____

(c) Water _____

(d) Sprinkler system (if separate) _____

2. Water detectors _____

3. Sump pump or portable pump _____

4. Flashlights, with replacement batteries _____

5. CB radios _____

6. Handi/Talkies _____

L. In-house emergency equipment and disaster supplies? **Use Checklist C.**

M. Clearly posted and updated emergency evacuation maps?

N. Other potentially unsafe or damaging conditions: [**Use a copy of this page for each area checked.**] Record Date Checked

LOCATION: _____

1. Exits or corridors, aisles, or stairwells blocked?

2. Fire doors closed; alarms working properly? _____
3. Exit signs not visible? _____
4. Warped or sticking doors? _____
5. Dangerous chemicals or other materials improperly stored?

6. Ceiling or other leaks? _____
7. Plumbing okay? _____
8. Water stained ceilings indicating possible leaks?

9. Air conditioning units checked for leaks? _____
10. Worn exposed wiring? _____
11. Electrical equipment not grounded? _____
12. Overloaded sockets? _____
13. Electrical cords in dangerous position? _____
14. Other potential tripping hazard? _____
15. Books or boxes dangerously piled or stored on the floor?

16. Unsafe stacks (improperly balanced, braced, etc.)?

17. Other unsafe conditions? List: _____

CHECKLIST A

EMERGENCY TELEPHONE NUMBERS

It is the responsibility of the person first observing the disaster to call _____ and a member of the Disaster Team.

<u>Title</u>	<u>Name</u>	<u>Office Phone</u>	<u>Home Phone</u>
Security	_____	_____	_____
Building Mgr	_____	_____	_____
Disaster Team	[Call in order given until you reach someone.]		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
Library Dir	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

CHECKLIST B

FIRE EXTINGUISHERS

DRY-CHEMICAL FIRE EXTINGUISHERS

Dry-chemical extinguishers will smother any type of fire, including electrical and chemical, by coating the burning area with a layer of powder that cuts off the supply of oxygen.

INSPECTION CHECKLIST

<u>Location/Code Number</u> <u>Reported/Repaired</u>	<u>Date</u>	<u>Condition</u>			

CHECKLIST C

IN-HOUSE EMERGENCY EQUIPMENT AND DISASTER SUPPLIES

The following list provides examples of the types of materials which should be on hand in case of an emergency. A blanket worksheet is also provided.

<u>Equipment</u>	<u>Location</u>	<u>Amount</u>	<u>Date Checked</u>
Book Trucks			
Fans			
Walkie-Talkies			
Boots			
Flashlights			
Unprinted Newsprint			

Brooms	_____	_____	_____
Freezer Paper	_____	_____	_____
Vacuums	_____	_____	_____
Buckets	_____	_____	_____
Ladders	_____	_____	_____
Wax Paper	_____	_____	_____
Cardboard Boxes			
Size _____	_____	_____	_____
Size _____	_____	_____	_____
Mops	_____	_____	_____
Paper Towels	_____	_____	_____
Plastic Garbage Bags	_____	_____	_____
Disinfectant	_____	_____	_____
Plastic Milk Crates	_____	_____	_____
Duct Tape	_____	_____	_____
Plastic Sheeting	_____	_____	_____
Extension Cords	_____	_____	_____
Humidifier	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

[illegible]

II. DISASTER RESPONSE

A. **Emergency Contact List:**

1. **Staff:**

- a. **Disaster Action Team:** A Disaster Action Team should consist of people who are assigned and trained to deal with a disaster of any kind, flood, fire, earthquake, etc. A chain of command should be designated in a specific order and a typical list could look like this.

<u>NAME/DEPT</u>	<u>RESPONSIBILITY</u>	<u>WORK/HOME#</u>
Librarian _____		
Facilities Manager _____		
Recovery Coordinator _____		
Maintenance _____		
Security _____		
Risk Manager _____		
Cataloger _____		
Dept. Head _____		
Operations Director _____		
Archivist _____		

- b. **CPR and First Aid Trained:** A list should be available in all departments with the names of all staff who are trained in CPR and First Aid.

2. **Emergency Services Numbers:**

It is necessary to maintain a list, with telephone numbers for emergency services. The list could look as follows:

<u>TYPE OF SERVICE</u>	<u>CONTACT PERSON(S)</u>	<u>PHONE</u> <u>NUMBER</u>
Police Dept. _____		
Fire Dept. _____		
Ambulance _____		

Health Dept. _____

Poison Control _____

Security Dept. _____

Sheriff _____

It is also useful to maintain a list of experts:

	<u>NAME</u>	<u>TITLE/</u> <u>ADDRESS</u>	<u>PHONE</u> <u>NUMBER</u>
--	-------------	---------------------------------	-------------------------------

Architect _____

Carpenter _____

Chemist _____

Computer Engineer _____

Electrician _____

Fumigation _____

Insurance Agent _____

Janitorial Service _____

Legal Advisor _____

Locksmith _____

Pest Control _____

Plumber _____

Telephone Co. _____

Utilities:

Gas _____

Electric

Deep Freeze Facility _____

Vacuum or Freeze
drying facility _____

3. **Organizations:** A list should be maintained of organizations and services which could be called upon as necessary. A sampling of these could be:

American Institute for Conservation
Washington, DC
(202) 364-1036

Library of Congress Conservation Center
(202) 287-5634

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

Blackmon Mooring
1 Summit Ave., Suite 202
Ft. Worth, TX 76102 (800) 433-2940

Northeast Document Conservation Center [NEDCC]
Abbott Hall
24 School Street
Andover, MA 01810

SOLINET Preservation Program
Southeastern Library Network
400 Colony Square, Plaza Level
Atlanta, GA 30361-6301

Los Angeles Preservation Network [LAPNET]
c/o Chris Coleman
11334 Univ Research Lib
UCLA
Los Angeles, CA 90024

Inland Empire Library Disaster Response Network
c/o Sheryl Davis, Preservation Officer

University of California Riverside
PO Box 5900
Riverside, CA 92517

The Getty Conservation Institute (Art on Paper)
4503 Glencoe Avenue
Marina del Rey, Ca 90292 (213) 822-2299

Also develop your own local contacts from libraries, Institutes
and Museums close to your library.

B. Procedures:

1. Emergency Instruction in Case of EARTHQUAKE.

Follow instructions given by [name of local agency]

or:

a. During the shaking:

- (1) Remain where you are.
- (2) If you are indoors, take cover under a desk, heavy table, or stand in a doorway, hallway or by a wall.
- (3) Move away from glass and falling objects.
- (4) If you are outdoors, move away from power poles or lines, lamp posts and tall buildings.

b. After the shaking: Abide by local guidelines, or follow instructions given by local authorities.

c. When you have, or are given, access to the library:

- (1) Check for fire or fire damage.
- (2) Check for flooding or water damage.

2. Emergency Instructions in Case of FIRE:

- a. Activate the ALARM, unless the fire is small and can easily be controlled. Evacuate the area.

- b. Call the Fire Department. (911)
- c. Fight the fire **ONLY IF:**
- (1) You know how.
 - (2) The fire is small.
 - (3) Confined to the area where it started.
 - (4) You have a way out.
 - (5) You can work with your back to the exit.
 - (6) You have the right type of extinguisher.
 - (7) You feel confident that you can operate it effectively.
- d. **DO NOT** fight the fire if:
- (1) You have any doubts about fighting it.
 - (2) It is spreading beyond the area where it started.
 - (3) It could block your escape route.
- e. After you have taken the above steps:
- Notify the library administration:
- Title/Name _____ work_____
- home_____
- or
- Assistant Name _____ work_____
- home_____
- or
- Disaster Recovery Coordinator:
- Name _____work_____

home_____

- f. If they cannot be reached, call the persons listed below, in the order listed, until you reach someone:

Recovery Specialist Name _____
work_____

home_____

Disaster Recovery Team Member_____ home_____

Head of afflicted area Name _____ home_____

- g. After the fire:

(1) Look for water damaged materials.

(2) Look for smoke, soot, dirt on library materials.

(3) Look for fallen materials.

Recovery Specialist: Name _____ Phone _____

If neither is available call another member of the Disaster Action Team. (See Appendix C.)

- f. TURN OFF HEAT in the building.
- g. TURN ON AIR CONDITIONING, even in winter, if possible.
 - or ask building maintenance [phone]
 - or ask security [phone] to do so.
- h. OPEN DOORS and WINDOWS to create maximum air flow.
- i. USE FANS and DEHUMIDIFIERS to create air currents if electrical facilities are operational.

The extent and the source of the flooding will dictate if Public Safety [phone] must be notified and if water or electricity must be turned OFF/ON.

- j. While waiting for Disaster Recovery Personnel:
 - (1) Get plastic sheets to cover materials under running water.
 - (2) Paper towels to absorb (**don't wipe**) water on shelves or books.
 - (3) Mops and pails for clean up. (See Appendix __ for more supplies.)
 - (4) Remove library materials from the floor if they are dry.
 - (5) If the [name of Recovery Coordinator] or an alternate is, or will soon be, available to assume responsibilities, wait. Otherwise, proceed as described on page ____.
- k. Assess Damages:
 - (1) **What** has been damaged?

- (a) Books, paper files, audio and video tapes must be salvaged/ treated within 48 hours.
 - (b) Microforms can wait a maximum of 3 days. (Keep them wet?)
 - (c) Computer disks and art works require specialized attention.
- (2) **Where** are the damaged materials? See floor plans; Appendix A: The floor plans show the location of collections for the purpose of identifying priority materials.
- (3) **How many** items have been damaged?
- (a) Library staff and facilities can salvage [number] items locally without outside assistance.
 - (b) Library staff and facilities can pack out [number] items locally without outside assistance.
 - (c) Outside help is needed if more than [number] items require some form of treatment.
- (4) **How wet** are the materials?
- (a) Submerged paper will not develop mold.
 - (b) Wet and covered with debris. (Cleaning and salvage, or packing will depend on number of items.)
 - (c) Wet and tightly packed books on shelves develop mold more slowly.
 - (d) Wet and loosely stacked books are more susceptible to molding. (Salvage or packing will depend on number and on time wet.)
- (5) **How long** have items been wet?
- (a) Books and paper materials, less than 48 hours?

- (b) If more than 48 hours consider mold treatment.
- (c) Black and white film, less than 3 days?
- (d) If more than 3 days consult (photographic specialist).
- (e) Colored film, less than 48 hours?
- (f) If more than 48 hours consult (photographic specialist).
- (g) For paper materials and black and white film wet more than 48 hours, colored film type materials wet more than 3 days, tapes, computer disks and art works.

4. **Establish Priorities:**

The Disaster Recovery Coordinator (DRC) will make decisions based on, but not necessarily in accordance with, the priorities defined by the Disaster Preparedness Team.

The collection priorities list is a guide but, because each disaster is unique, the DRC will consider the circumstances and limiting factors (time, access to materials, availability of resources, etc.) which may require deviations from the plan.

5. **Plan Recovery:**

a. **Call for assistance** giving dress code and meeting point:

- (1) Disaster Recovery personnel, and other library staff as needed for in-house salvage of materials.
- (2) Service-providers for pack-out.
- (3) Neighboring libraries or volunteers to assist in a major disaster.

b. **Get supplies** or assign someone to:

- (1) Retrieve from in-house containers.

(2) Request from institutional or network storage facilities. [Contact person or Appendix __]

(3) Order from commercial vendors.

Appendix __: Supplies/Suppliers: in-house, off-site, vendors.

Appendix __: Open purchase order which can be duplicated in emergencies.

c. **Prepare staging area** as near as possible to disaster area and with best access to supplies and shipping (if required).

(1) Have table or other work surfaces.

(2) Have supplies (boxes and freezer paper, set up on a paper spool to tear off) delivered close to the area.

(3) Observe safety precautions for workers, take security measures for materials, or, request assistance from (name and phone # of library's health and safety officer) and from (name and phone # of library's security agency) if circumstances, extent of project or value of materials, warrant it.

d. **Assign Responsibilities:**

(1) Name group leaders.

(2) Assign helpers to groups according to skill or experience.

(3) Divide the work among groups: searchers/ transporters of wet materials, and wrappers/ boxers. Transfer workers from one task to another as necessary to avoid exhaustion and stress.

e. **Supervise the operation:**

(1) Act as liaison and public relations officer.

- (2) Revise priorities/procedures as deemed necessary.
- (3) Contact the (names and phone #'s of preferred document reprocessor, consultant, mover, freezer facility) needed and arrange for appropriate contracts.

f. **Pack-out:**

(1) Books:

(a) Searcher/transporters:

- (1 After the clean up operation remove all the wet books from the shelves and place them on trucks.
- (2 Look on top and bottom shelves first, if water has dripped down from the ceiling.
- (3 When full, wheel the trucks to the staging area.
- (4 Do not attempt to remove mud, to open, or to separate leaves off of wet books.
- (5 Do not leave any books to dry out by themselves.

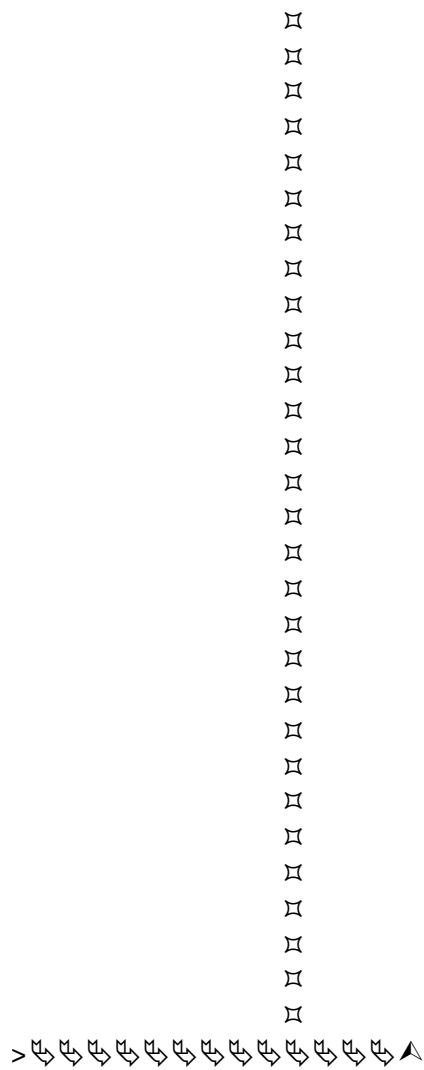
(b) Wrappers/boxers:

- (1 Wrap volumes in freezer paper, slick side toward the book, without folding in the head and tail ends of the paper.
- (2 Place the wrapped books side by side in boxes, spine edge down.
- (3 Fill the box one layer deep only.
- (4 Load boxes onto trucks and deliver to the freezing facility as soon as possible.
- (5 Do not stack boxes more than 3 high.

(2) Photographic Materials:

- (a) Place photos, negatives, films, microforms in plastic garbage cans with cold clean water and ship to reprocessor.
- (b) Deliver to reprocessor within 48 hours for color and 72 hours for black and white.
- (c) Remove from the water what cannot be treated within the 48 and 72 hour limits, and arrange for blast or rapid freezing.

C. **Security, Psychology, P.R.:**



APPENDICES

Attach here: Appendix A - Floor Plans

 Appendix B - Priorities List

 Appendix C - Human Resources
 Disaster Action Team
 Emergency Phone Numbers
 Staff Phone Numbers

 Appendix D - Services

 Appendix E - Supplies

 Appendix F - Emergency Purchase Order Form

APPENDIX E - SUPPLIES

Index of Headings Used in a Disaster Supplies List*

Barricade Tape	masking tape (see Tape)
blast drying (see Drying)	Megaphones
Blotting Paper	Moisture Meters
Boots	mold/mildew (see Fumigation)
Boxes	Mops
Brooms	Mylar
Buckets (Rubber)	Newsprint
butcher paper (see Freezer Wrap)	pails (see Buckets)
cases (see Boxes)	Pallets
Catering	paper (see Blotting Paper; Newsprint, Freezer Paper)
Caution Wet Floor Signs	Paper Towels
cold storage (see Freezer Space)	Plastic Sheeting
Dehumidifiers	portable toilets (see Toilets)
Drying	power extension cords (see Extension Cords)
emergency lights (see Lighting)	Rags
Extension Cords	Refrigerated Trucks
Face Masks	Rubbish Hauling
Fans	shoes (see Boots)
Flashlights	Shovels
folding tables (see Tables)	Shrinkwrap
food (see Catering)	signs (see under specific type of sign)
Forklifts	Sling Psychrometers
freeze drying (see Drying)	Sponges
Freezer Space	Tables
Freezer Wrap	Toilets, Chemical
Fumigation	towels (see Paper Towels)
Garbage Cans	Trash Bags
Generators	trash cans (see Garbage Cans)
Gloves	Tubs
Hard Hats	Walkie-Talkie
Hygrothermographs	
insect infestation (see Freezing; Fumigation)	
Keep Out Signs	
Lighting	
Lightsticks	
Lysol Spray	

* Compiled from LAPNet's Disaster
Suppliers List

III. Disaster Recovery

A. Restoration Methods:

1. Drying:

a. Air:

(1) Supplies:

- Tables
- Fans
- Hair dryers
- Blotting papers and/or
- Unprinted newsprint
- Wax paper
- Nylon line
- Extension cords
- Trays
- Water bottle
- Polyester sheets
- Press board
- Cardboard
- Weights
- Plastic clothes pins

(2) Recovery Operations:

- (a) Make sure that all staff and volunteers are adequately trained and supervised for all air drying tasks. Because of the nature of the materials, it is also a good idea that this recovery station be in a very quiet work area away from the stress of other recovery operations. This is a very labor intensive task that requires a large work space and can only be used for drying smaller quantities of materials.
- (b) Make sure that the work area is clean and dry with the temperature and relative humidity as low as possible with good air circulation. Moving air accelerates the drying process and helps to prevent or slow down the development of mold and mildew. If working outside remember that prolonged exposure to sunlight is detrimental to all materials.
- (c) Single Items - can be laid out on a clean, dry, flat work surface or hung on lines. Remember that wet paper is extremely fragile.

- (d) Wet Items - see if they can be removed gently one at a time and placed between blotters or unprinted newsprint. If necessary use a press board and weight to hold the stack in place. If the items are not easily separated, then:

- [1] Dampen a sheet of polyester film (3 mil thickness) and lay it on top of a wet pile of single sheets. Press down lightly on the film. Gently lift one corner of the film, and use a bone folder or spatula to help ease away a sheet or sheets from the pile onto the film. Slowly roll the film away from the pile lifting up the wet sheet(s).
- [2] If you picked up more than one, then lay it polyester side down on a clean flat surface. Using a second piece of film, repeat the rolling motion to remove the top item from the pile. You will find that by careful, gentle manipulation you can roll the film back from the pile with a single wet sheet attached to it. Place the wet item between clean dry blotters.
- [3] If space, time and supplies allow, individual sheets can be hung up on lines with plastic clothes pins and allowed to dry. Extremely wet papers are too fragile to be dried in this manner. Really wet items need to be dried between blotting papers and or newsprint.

- (e) Bound Volumes - can be carefully dried for a few minutes with a hand held hair dryer. Then the books can be placed open on tables to dry. The best procedure is to hold the book by the spine, turn it upside down so that the top or head of the book is on the table. Then gently open the book so that the volume is in a wide "V" for support and ease in drying. Soft cover volumes could be supported with cardboard spacers so that they will stay upright. If items are just slightly damp they could be hung up on lines to finish drying. (Approximately 3 nylon lines, 1/32" in diameter, 1/2" apart are needed for a regular size volume 1 1/2" wide.)

- (f) Final Stage - When books are almost dry, they should be closed and laid flat, gently formed into their normal shape and held in place with a light weight. **THEY SHOULD NOT BE STACKED ON EACH OTHER.** They should be completely dry before they are returned to the permanent shelves, otherwise mold will develop inside of the volume.

If paper stacks remain damp, the documents should be interleaved with clean, dry sheets. They should be checked at least every four hours. Once the items are dry they can be sent to sorting for input into new file folders and boxes.

(3) SELECT BIBLIOGRAPHY:

Buchanan, Sally A. Resource materials for disaster planning in New York institutions, New York: New York State Library Disaster Planning Project, 1988, pg. 20.

Toronto Area Archivists Group Education Foundation. An ounce of prevention, Toronto: Authors, 1986, pgs. 67-68.

Waters, Peter. Procedures for salvage of water-damaged library materials, Washington D.C.: Library of Congress, 1975, pgs. 16-21.

b. Freezing, vacuum drying, and vacuum freeze drying :

- (1) Background: Research and case studies have shown that large quantities of water damaged library and archival materials can be stabilized and salvaged when frozen and stored at low temperatures (ideally -20 F). Freezing allows the institution time to plan, organize, control and coordinate their disaster recovery and drying plans. Freezing is not a drying method and will not kill mold spores. It does give the library time to plan and organize, and minimizes the damage to the materials. Vacuum drying and vacuum freeze drying are other alternatives for freezing and drying large quantities of damaged materials.
- (2) Definitions:
 - (a) Freezing: this method uses a self-defrosting fast freezer that has the capacity to freeze items very quickly, at temperatures below -10 F. This method is suitable for non-coated stock and smaller quantities. Items must be left in the freezer from several weeks to several months. As staff time and space permit, items can be taken out of the freezer and air dried before they are returned to their regular shelves.
 - (b) Vacuum drying: this method uses a vacuum thermal-drying chamber. Wet or frozen items are placed in the chamber, a vacuum is drawn, heat is introduced, and the materials are dried. The temperature stays above 32 F. This method is good for large numbers of materials, is easier and more cost effective than air drying, and is good for extensively water damaged items. Unfortunately this method often produces extreme distortion of books requiring them to be rebound. This process tends to also cause coated papers to stick together.
 - (c) Vacuum freeze drying: in this method frozen books and records are placed in a vacuum chamber. A vacuum is drawn and carefully controlled heat is applied. The temperature is kept below 32 F. This combination causes the frozen water to go directly from that state to the gaseous state. This process of sublimation eliminates further damage to the materials through distortion,

bleeding and sticking together. It is an effective way to handle and dry large quantities of materials. The main drawback is the cost.

c. **Dehumidification:**

- (1) Definition - to remove the moisture from the air, the collection, and the building using large commercial dehumidifiers.
- (2) Benefits and Disadvantages - This method is fairly new in the library and archival field, though it has been used extensively in office buildings. A major benefit is that staff does not need to remove and box any items, all of the work is done in-house. If it is not done within 24 hours though, mold & mildew can set in, and swelling and adhesion has started. Also additional testing and reports on this method still need to be conducted and checked into before an institution decides on this option.

2. **Smoke, Soot, and Char Damage:** Smoke damage is usually irreversible, but it is possible to remove some of the surface soot and char by using some of the following methods. The paper should be completely dry and in good condition. Consult a conservator for rare and valuable items.

a. Remove soot from paper by use of chemical sponges, erasers, or a dry cleaner such as Groomstik or Absorene Paper & Book Cleaner which is available from archival supply companies such as Light Impressions, Archival Quality Materials, or Demco.

- (1) Use chemical sponges in a gentle, brushing motion. Do not scrub since this will damage the paper. Try a test page before doing a whole book. It has been reported that chemical sponges are good for a quick cleanup, but that they leave a residue film and smell which impedes other types of cleaning. (Abbey Newsletter, October, 1986).
- (2) Erasers or a dry cleaner also need to be used with a gentle brushing motion. Use an artist brush to remove the rubbings. One source reported that pink pearl erasers worked best. Another suggestion is to use extra fine steel wool to clean soot from leather bindings. (Abbey Newsletter, October, 1986).

b. Char can be trimmed by using paper shears, razor blades, or scissors.

Consider the aesthetics of a damaged item prior to returning it to the shelf. Some suggestions for improving appearances are: rebinding, phase boxes, file folders, or adding a cover or jacket.

3. **Broken Books:** Decide if the book is worth repairing? Is it vital to the collection? Can it be replaced? Is it rare or valuable, and should it be kept?

- a. If the answer is yes, the book is to be kept, consider mending, rebinding, or use of a phase box. Consult a conservator in the case of rare items.
- b. If the answer is no, the book will not be kept, discard the book following the institution's deaccessioning procedures.

4. **Biopredation:**

- a. **Mold and Mildew:** Mold and mildew are fungi that form under certain conditions. If untreated they can severely damage library material. Conditions are particularly favorable when the disaster involves water, but they can form at any time.

(1) Factors favorable for the development of mold and mildew.

- (a) Temperature (+75 F).
- (b) Moisture (+60% humidity).
- (c) Dark.
- (d) Little air circulation.

(2) Steps to take:

- (a) Transfer all infested material to an isolation room.
- (b) If number is large, prepare for freezing.
- (c) Thoroughly clean and sterilize infected area.

(3) Mass methods **(DO NOT ATTEMPT WITHOUT EXPERT ADVICE. MAY BE HAZARDOUS TO BOOKS AND HEALTH OF WORKERS):**

- (a) Fungicidal fogging with Thymol
- (b) Fumigation with Ethylene Oxide

(4) Treatment of individual items infested with mold and mildew:

(a) Treatment of books:

[1] Supplies needed:

Blotters
 Cheesecloth
 Lysol spray
 Q-tips
 Gloves (optional)
 Mask (optional)
 Wax paper (optional)

- [2] Lay the item on a clean white blotter. Wet the Q-tip with the Lysol and test ink to see if it is damaged by Lysol. If it is, stop!
 - [3] Lightly spray item with Lysol. Use wax paper to cover uninfected areas.
 - [4] Use cheesecloth to carefully wipe or blot the infected area. Repeat if necessary. **DO NOT SCRUB!**
 - [5] Let item dry while working on the next one.
- (b) Surface cleaning for flat papers or books.
- [1] Supplies:
 - Dry cleaning pads or powder
 - Weight(s)
 - Soft, wide brush
 - Scrap paper
 - Wastebasket
 - Air bulb (optional)
 - Mask (optional)
 - Gloves (optional)
 - [2] Examine item to see if it is completely dry. Do not proceed if paper is not in good condition, or is flaking, so that the item will not be scratched or damaged. If in doubt get expert advice.
 - [3] Lay item on clean working surface. Use gloves or make certain hands are clean.
 - [4] Lay item down and use weight to hold it in place. Use air bulb to blow away large pieces.
 - [5] Pretest on a small area before continuing.
 - [6] Sprinkle dry cleaning powder on item to be cleaned. Gently roll powder with your fingertip over stained areas. Powder picks up surface dirt and turns black or grey.
 - [7] Brush away powder from the center out to the edges. Do not leave any powder residue on item.
- (c) Insects and rodents:
- [1] Identify pest.
 - [2] Consult with a professional. Remember that anything used to exterminate should be considered hazardous. Don't proceed unless you have thoroughly discussed the situation with several professionals, including safety experts.
 - [3] Try to locate the way pests entered and carefully block their entrance way.

5. **Dirt:** Before cleaning a book or paper, make sure that it is completely dry and is not fragile or brittle. Surface dirt can be removed by gently brushing away with a soft artist brush, by use of a special eraser, or by use of a dry cleaner such as Groomstick or Absorene Paper & Book Cleaner.

Mud on books can be washed off if the books are already thoroughly wet and won't be damaged further by contact with water. Otherwise, mud on fairly dry books can be dried and then cleaned off. For thoroughly wet books, use a tank with clear, running water. Immerse the book in the water. Keep the book closed and clean with a gentle, dabbing motion of a soft sponge. Avoid brushing and rubbing. Hard to remove stains can be dealt with by a professional conservator after the book dries.

B. **Recovery and Completion:**

1. **Housekeeping and Rehabilitation:**

- a. **Building:** The building should have passed an official safety inspection. The following items should be thoroughly checked:
 - (1) All areas of the building cleaned and sterilized. Make sure it has thoroughly dried.
 - (2) Heating and air conditioning systems should be in full working order.
 - (3) Fire detection and extinguishing systems should be in full working order.
 - (4) Security systems should be in full working order.
 - (5) Repairs to structure and equipment should be complete and building certified for occupation.
- b. **Collection:**
 - (1) Select area for rehabilitation for all material damaged by water.
 - (2) Do daily random checks for mold.
 - (3) Assess material for replacement or for further treatment.
 - (4) After six months, material may be returned to collection.
 - (a) Only thoroughly dry material should be returned.
 - (b) Material should be thoroughly examined by an expert.
 - (c) Check that markings are correct.
 - (d) Maintain accurate records.

2. **Reshelving:** Reshelving, or relocation, describes the orderly transfer of restored items to temporary or permanent locations after return from the drying station. A temporary location, with plenty of space so items can be spread out, will be used first because:

- a. A second evaluation of the material by staff is needed to decide which items need binding, mending, labeling, or discarding. These items are separated from the material ready to be shelved.
- b. The material ready to be shelved needs to be put into its proper sequence so it can be easily accessible until removal to a permanent location.
- c. Insurance claim settlement cannot be completed until the loss evaluation is completed.

Before the material is permanently housed, some factors need to be kept in mind:

- a. The building has been officially declared ready for occupancy.
- b. The stack area is stabilized and ready.

After the material has been reshelved in a permanent location, selected areas need to be checked periodically (after a week, 2 weeks, a month, etc.) to see if there is any evidence of mold growth.

3. **Assessment and Revision:**

- a. Purpose: Every disaster plan needs to be established according to the needs and demands of the institution that it is meant to serve. In addition, it is very important that the disaster plan cover all types of disasters, big and small with clear instruction on what needs to be done. The plan must be reviewed frequently so that any necessary changes and updates can be made.
- b. Disaster Assessment: Management staff, should have a simple easy to follow checklist that can help them to make a final assessment of how well they met the disaster and were able to deal with it. Some checklist items could be:
 - (1) Staff performance.
 - (2) Adequate supplies.
 - (3) Cooperation between departments, division, outside help.
 - (4) Adequate record keeping.
 - (5) How efficiently were things handled? How can they be improved?
 - (6) Listing of unexpected problems and their solutions.
- c. Revision: Using disaster drills, brainstorming sessions, and disaster follow-up assessments, staff should periodically review and update disaster plans so that they will be adequate to meet the needs of the institution when they are needed.