GCIHS Collections Emergency/Recovery Plan

(Approved by GCIHS Board 4/19/20 "as is" (including pending information (in red) to be completed post Corona Virus and after the new archives space construction is completed)

Great Cranberry Island Historical Society (GCIHS)

Cranberry Road, PO Box 12, Cranberry Isles, ME 04625

Prepared by: Anne Grulich, Ben Sumner, Phil Whitney January 2020
(inspired by the Abbe Museum Disaster Plan)

TBD 1/6/20

- Merge Ben's list of contacts. from his procedures manual
- Purchase emergency supplies: plastic sheeting to cover shelves, etc.
- Concern: cistern water stored for fire sprinkler system should be tested; may need to be drained and refilled before it's sprayed throughout the building in an emergency.

EMERGENCY Contact information

[to be merged with Manager Ben Sumner's emergency contact list]

Call 911 for fire, ambulance, police response.

Pull the Fire Alarm (sounds in building only).

If necessary, activate the overhead sprinkler system (instructions here)

In event of burst water pipe, shut off the main water valve. (Handle is located on the floor in in the right rear utility room of the basement.)

If you discover an emergency, call the people on this list until you reach someone who can assist in addressing the problem.
1 – Phil Whitney, President, 207-244-5933 (H); 207-460-5376 (C)
2 – Ben Sumner, Manager, Need tele numbers
3 – Barbara Meyers, Board Member, 207-244-0106 (H); 207-479-3328 (C)
4 – Anne Grulich, Archivist, 443-926-3580 (C)
5 – Sharon Morrell, Board Member, Need tele numbers

Technology problems

NAS and Cloud backup:

Tom Powell, tom@afewmilesout.com, Need tele numbers

Laptops and miscellaneous:

Jeff Pease, jeff@islesfordcircuits.com, Need tele numbers

Digital Archives Catalogue:
George Soules, gsoules@avantlogic.com
207-244-8034 (www.avantlogic.com)

Website**:**

Matt McFarland, Downeast IT, (207)669-2776, matt@downeastit.com
55 Crescent Circle, Surry, ME 04684 www.downeastit.com

If collections need to be temporarily removed from GCIHS consider storing at Ladies Aid, Williams squash court, or the GCI school building.

EMERGENCY PREPARATIONS

Ensure the auxiliary generator is fueled and functional.
Have emergency lighting and flashlights on hand.

Floods and storms

- Ensure that all collections are at least 4 inches off the floor.
- Drape plastic sheeting over shelving units, exhibit cases, etc.
- Move valuable collections to upper levels of the building
- Move collections to an interior location away from windows.
- Shutdown computers and disconnect other electrical equipment that is not being used.

Forest Fire

- Close all doors and windows to prevent drafts.
- Close the main propane gas valve and turn off any pilot lights.

If building will be exposed to smoke

- Set the HVAC systems to use only recirculated air. Close all doors, windows, and outside air vents.
- If possible, install HEPA filters in the building. Do not use electrostatic filters, as they produce ozone (which can be damaging) and allow dust and smoke particles to settle out onto the collections.

Contents (as of 1/6/20)

Prepare for Recovery of Collections

Stabilize the Building and Environment

If the emergency involves water (such as wet collections, furniture, carpeting, or even standing water), it is very important to quickly dry out the building and environment to avoid mold growth.

- **Do not turn up the heat**; this will not dry out the space and may encourage mold growth. If the outdoor humidity is low, open the windows.
- If the climate control system is working, it should be used to provide as much cooling and dehumidification as possible. The goal should be to keep the temperature below 70 degrees Fahrenheit and the humidity as much below 50 percent as possible.
- Wet carpeting should be removed and wet furniture and standing water should be removed. Even if the carpeting appears dry, it must be checked underneath to ensure that both the carpet and the padding are dry.
- If the climate control system is not sufficient to reduce the temperature and humidity to the desired levels, outside assistance will be needed. (See section on External Suppliers and Services for companies that specialize in building dry out.)
- Monitor the temperature and humidity in the recovery area several times a day to ensure that the desired conditions are reached and maintained for the duration of the recovery effort.

Get advice from a preservation professional.

Unless the disaster is very small, it is likely that you will want to contact a preservation professional to ensure that you are responding properly. In the event of a major disaster, you may need to arrange for a professional to provide on-site assistance.

Inform History Trust, Raney Bench, Executive Director, MDIHS raney@mdihistory.org , 207 276-9323; and Hannah Stevens (HT Collections Management Committee) College of the Atlantic (207) 801-5662, hstevens@coa.edu

Professional Preservation Advice - Regional Centers

Organization:	**Northeast Document Conservation Center**
Contact:	
	100 Brickstone Square Andover, MA 01810
Phone:	(978) 470-1010
After hours phone:	**1-855-245-8303 (24 hr hotline - reccovering paper-based collections)**
Web site:	https://www.nedcc.org/
Specialty:	disaster response referreals, paper-based material
Organization:	CERC Maine
Contact:	Ellen Dyer **Maine State Museum** 83 State House Station, Augusta, ME 04333-0083

Phone:	(207) 287-6696
Web site:	http://cercmaine.org/
Specialty:	planning, links to resources

Organization:	**American Institute for Conservation of Historic and Artistic Works**
Contact:	727 15th Street NW, Suite 500
	Washington, DC 20005
	Email: emergencies@culturalheritage.org
Phone:	202-452-9545
After hours phone:	1-202-661-8068 (24 hr disaster hotline)
Web site:	https://www.culturalheritage.org/
Specialty:	Guidance for historic and artistic objects

Professional Preservation Advice - Conservators

Organization:	**Tuckerbrook Conservation**
Contact:	Ronald Harvey
	2498 Belfast Road
	Lincolnville, ME 04849
Phone:	207-763-3973
After hours phone:	207-763-3973
Web site:	https://www.mainemuseums.org/Sys/PublicProfile/6478408/1209888
Specialty:	Objects

Organization:	**Teresa Myers Conservation Services**
Contact:	Teresa Myers
	26 Frandy Lane
	Sebec , ME 04481
Phone:	(207)564-3910
Web site:	http://www.myersconservation.com/
Specialty:	Objects

Organization:	**Head Tide Archaeological Conservation Laboratory**
Contact:	Molly OGuinness Carlson
	35 Sheepscot Shores Road, Suite A
	Wiscasset, ME 04578
Phone:	207-882-9078
Web site:	mollyocarlson@gmail.com
Specialty:	archaeological material

- **Decide what will be salvaged and what will be discarded.**
- **Decide how the materials to be salvaged will be treated.** See General Salvage Procedures for a summary of treatment options. Sort wet collections, separating those to be frozen from those to be air-dried. As you begin sorting and moving materials, it is essential to keep track of collections at all times.

- **Determine whether it will be necessary to relocate collections,** either to dry them or to store them temporarily to protect them from danger while the building and damaged collections are salvaged. Options to consider on GCI are: Ladies Aid, upstairs at the GCI school building, William's squash court
- **Gather supplies and arrange for services.** Gather supplies and arrange for services.

RECOVERY - GENERAL SALVAGE PROCEDURES

Freezing

If wet materials cannot be dried within 48-72 hours, they should be frozen because they are at risk of developing mold, particularly if there is high humidity. Freezing wet materials also stabilizes them, keeping water damage from worsening. Water causes a variety of damage to paper-based collections: book bindings and pages swell and distort, pages and documents cockle, water-soluble inks can bleed, and coated papers begin to adhere to each other as soon as the volumes begin to dry. However, once wet collections are frozen, no additional damage occurs. Thus, if freezing occurs quickly there is less physical damage and more chance that the materials can be salvaged rather than replaced. It is difficult to transfer wet collections directly to a salvage company for freezing quickly enough to prevent mold and minimize water damage, since there are only a few of these companies nationwide. In addition, institutions often require time to make decisions about what should be done and allocate funding for salvage. Thus, it is usually best to freeze collections locally, even if they will ultimately be sent to a salvage company to be vacuum freeze dried. A commercial blast freezer will provide the best results; materials should be frozen at -10 degrees Fahrenheit or lower.

Be aware, however, that not all paper-based materials can be frozen. The *Salvage of Specific Media* section indicates which materials should not be frozen. In general, bound volumes and paper records can be frozen. If necessary, most photographic materials can be frozen, although it is better to dry them immediately. Cased photographs (such as daguerreotypes, ambrotypes, tintypes) should **never** be frozen.

<u>Consider these freezers on GCI</u>: Hitty's Café, Ladies Aid, The General Store

Other MDI freezers to inquire about in a major disaster:

Local freezer (1) –

Name:	College of the Atlantic, Dorr Museum
Contact:	Carrie Graham 105 Eden Street Bar Harbor, ME 04609
Phone:	(207) 801-5638
After-hours phone:	
Cell phone:	
Regulations that must be complied with:	This is a freezer for natural history museum collections, so no food restrictions apply. Alternate contact is Scott Swann, (207) 288-5015 ext. 5892. Key is located in magnetic box on building side of freezer.

Local freezer (2) –

Name:	Merrill Blueberry Farms, Inc.
Contact:	
	P.O. Box 149 63 Thorsen Rd, Hancock Ellsworth, ME 04605
Phone:	207-667-9750
After-hours phone:	
Cell phone:	207-667-2541
Regulations that must be complied with:	Availability may depend on time of year, and when blueberry stock is in the freezers.

Drying Options

There are several options for drying wet collections. The method chosen will depend on the extent of the damage to collections and to the building, the amount of material involved, the rarity/scarcity of the damaged material, the number of staff or others available to provide assistance, and the funding available for salvage. If you choose to contract out for drying services, it is important to put a contract in place with the vendor. Remember that no drying method will undo the damage that has already been done, however. The materials will not look better after drying than they looked before drying began. However, some drying methods can minimize or prevent additional damage, and in general, the quicker collections can be dried (or frozen, as described above) the less damage there will be.

Air-Drying

Air-drying is best used for small numbers of damp or slightly wet books or documents. It is less successful for large numbers of items or for items that are very wet. It requires no special equipment and can be done on site using staff or volunteers, but it is very labor-intensive, requires a lot of space, and often results in bindings and paper that are very distorted. It is seldom successful for drying bound volumes with coated paper. There will also likely be additional costs for rehabilitating collections, such as rebinding, flattening of single sheets, and additional shelf space to store volumes that remain distorted after drying. It is important to always contact a conservator or other preservation professional about drying unique or rare materials; they will sometimes choose to air-dry the item(s) using special techniques, or they will suggest another drying option.

In general, air-drying must be done in a clean, dry environment where the temperature and humidity are as low as possible. At a minimum, temperature must be below 70 degrees Fahrenheit and humidity must be below 50%. The air should be kept moving at all times to accelerate the drying process and discourage mold growth, but care must be taken not to blow away loose documents. Single documents can be laid out on tables, floors, and other flat surfaces, protected if necessary by paper towels or clean, unprinted newsprint. Bound volumes can be dried on tables covered with plastic or unprinted newsprint. The volume should be interleaved about every fifty pages with paper towels or unprinted newsprint, and then stood on its head, fanned open, and placed on several sheets of absorbent paper. If the edges are only slightly wet, interleaving is not required. When volumes are dry, but still cool to the touch, they should be closed, laid flat on a table or other horizontal surface, gently formed into their normal shape, and held in place with a lightweight. **Do not** stack drying books on top of each other, and check frequently for mold growth, particularly along the gutter margin. **The above instructions provide only very general guidance; additional instructions will be needed if air-drying is to be undertaken.** There are a number of resources that provide detailed directions for air-drying wet materials.

Freezer-Drying

Books and records that are only damp or moderately wet may be dried successfully in a self-defrosting blast freezer if left there long enough. Materials should be placed in the freezer as soon as possible after becoming wet. Books will dry best if their bindings are supported firmly to inhibit initial swelling. The equipment should have the capacity to freeze very quickly, and temperatures must be below 10 degrees Fahrenheit to reduce distortion and to facilitate drying. Expect this method to take from several weeks to several months, depending upon the temperature of the freezer and the extent of the water damage. Caution is advised when using this method for coated paper, as leaves of coated paper may stick to each other.

Vacuum Freeze-Drying

This process calls for very sophisticated equipment and is especially suitable for large numbers of very wet books and records as well as for coated paper. Books and records must be frozen, then placed in a vacuum chamber. The vacuum is pulled, a source of heat introduced, and the collections, dried at temperatures below 32 degrees Fahrenheit, remain frozen. The physical process known as sublimation takes place; that is, ice crystals vaporize without melting. This means that there is no additional swelling or distortion beyond that incurred before the materials were placed in the chamber. Many coated papers can be difficult to dry without sticking together once they are wet. Because it is nearly impossible to determine which papers will block, all coated papers should be treated the same way for the purpose of vacuum freeze-drying: before any drying takes place, and ideally within six hours of becoming wet, materials should be frozen at -10 degrees Fahrenheit or lower. Then they may be vacuum freeze-dried with a high potential for success. Rare and unique materials can be dried successfully by vacuum freeze-drying, but leathers and vellums may not survive. Photographs should not be dried this way unless no other possibility exists. Consult a photograph conservator.Although this method may initially appear to be more expensive because of the equipment required, the results are often so satisfactory that additional funds for rebinding are not necessary, and mud, dirt, and/or soot is lifted to the surface, making cleaning less time-consuming. If only a few books are dried, vacuum freeze-drying can indeed be expensive. However, companies that offer this service are often willing to dry one client's small group of books with another client's larger group, thus reducing the per-book cost and making the process affordable.

Vacuum Thermal Drying

Books and records that are slightly to extensively wet may be dried in a vacuum thermal drying chamber into which they are placed either wet or frozen. The vacuum is drawn, and heat is introduced. Drying typically occurs at temperatures above 100 degrees Fahrenheit, but always above 32 degrees Fahrenheit. This means that the materials stay wet while they dry. It is an acceptable manner of drying wet records, but often produces extreme distortion in books, and almost always causes blocking (adhesion) of coated paper. For large quantities of materials, it is easier than air-drying and almost always more cost-effective. However, extensive rebinding or recasing of books should be expected. Given the elevated temperature used in drying, it is most appropriate for materials with short-term (under 100 years) value.

On-Site Dehumidification

This is the newest method to gain credibility in the library and archival world, although it has been used for many years to dry out buildings and the holds of ships. Large commercial dehumidifiers are brought into the facility with all collections, equipment, and furnishings left in place. Temperature and humidity can be carefully controlled to specifications. Additional testing is being undertaken, but the technique is

certainly successful for damp or moderately wet books, even those with coated paper, as long as the process is initiated before swelling and adhesion have taken place. The number of items that can be treated with dehumidification is limited only by the amount of equipment available and the expertise of the equipment operators. This method has the advantage of leaving the materials in place on the shelves and in storage boxes, eliminating the costly, time-consuming step of moving them to a freezer or vacuum chamber.

Packing

Whether collections are to be moved to another location for immediate air-drying or transported to a local freezer or commercial drying facility, the materials will need to be properly packed and the location/transport of all items will need to be documented. The order for packing collections will depend on the extent of the damage and the institutions salvage priorities. If collections will be frozen and vacuum-freeze dried, it is usually best to begin with the wettest materials first so that they can be frozen quickly. If only air-drying will be possible, however, it is better to begin with the collections that are the least damaged and most easily salvaged. If sufficient staffing is available, one or more packing crews should be put together. This will be the responsibility of the Collections Recovery Specialist and the Work Crew Coordinator. See the Disaster Response Team for names and backups for these two positions. The packing crew would consist of a crew leader, box assembler, retriever of collections, wrapper, packer, sealer, record-keeper, and transporter. Book trucks, handcarts, or dollies can be used to move packed materials within the building. See Appendix C: In-House Supplies and Appendix D: External Suppliers and Services for resources. Materials can be placed in cardboard boxes, milk crates, Rescubes, or other containers as appropriate. If cardboard boxes are usedthey should be no larger than 1.5 cubic feet, they should be lined with heavy-duty trash bags to prevent them from becoming wet, and they should never be stacked more than four boxes high. Packing instructions for specific types of collections can be found in the Salvage of Specific Media section below. If materials are muddy, sandy, or otherwise dirty, it may be necessary to rinse them before packing (assuming enough time and personnel are available). If materials have been damaged by salt water it is especially important to rinse them. Collections with soluble inks (watercolors, many manuscripts), animal skins (leather, vellum, or parchment), or works of art paper should <u>not</u> be rinsed, since rinsing may cause further damage. The area to be used for rinsing must have running water and good drainage. Personnel should be provided with rubber boots and waterproof clothing; see Appendix D: External Suppliers and Services for resources. If deposits of dirt are light, individual folders or volumes can be rinsed with a garden hose with a spray nozzle, keeping the item tightly closed to avoid transferring dirt between the pages. If deposits are heavy, a series of 3-8 large plastic garbage cans should be set up with a garden hose running into each can and the nozzle resting at the bottom. The water should be turned on to provide a slow but continuous flow into each can. Each item should be taken to the first can, held tightly closed, and immersed, and then to subsequent cans. The last station should have a hose with a spray nozzle for a final rinse. Excess water should then be squeezed from the volumes or folders. **Do not** try to remove mud or stubborn stains; this slows down the rinsing process and may further damage the materials. Note that the same rinsing procedure can be used for photographic materials and computer media, except that shallow dishpans or photo processing trays may be used instead of garbage cans.

Documentation

It is essential to document where collections were moved and what was done with them. This documentation allows the institution to keep track of which collections were damaged and where they have been taken. It will also be needed for insurance purposes. Both written and photographic documentation should be maintained, including documentation of salvage decisions and who authorized them. In general, all boxes or other containers must be labeled on all four sides. The contents should be described as appropriate (e.g., by shelf range, call number, cabinet, drawer, record group, series). It is also

helpful to indicate the quantity of material, the type of damage, the priority ranking of the material, and the destination of the container (e.g., freezer, air-drying). Alternatively, each container can be given a brief designation (e.g., floor/section and box number) and the packing and inventory forms can be used to record the detailed information described above.

Fire Damage

Collections that have been involved in a fire often also suffer water damage, which has been addressed above. Problems that result specifically from fire include charring (either completely or just around the edges), smoke or soot deposits, and smoke odor. If collections have been charred but are still readable, they can be microfilmed or photocopied if they are of value, but great care must be exercised because the paper may be extremely brittle. Bound volumes that have been smoke-damaged or charred only around the edges can be sent to a library binder for trimming and rebinding. General materials with smoke or soot deposits on the edges can also be sent to a library binder for trimming, or they can be cleaned in-house using natural latex sponges to remove the deposits. Any rare, archival, or special collections materials should not be cleaned this way, however; a conservator should evaluate them. For collections with a residual smoke odor, there are professional companies that specialize in deodorization. Treatment in an ozone chamber will reduce the odor, but ozone is a powerful oxidizing agent that accelerates the aging of paper, so it should not be used on archival or other intrinsically valuable materials. Another possibility is to use storage boxes that incorporate zeolites; these have been shown to be effective in odor reduction.

Mold

If you discover mold on collections –

- Find out what is causing the mold growth. Look first for an obvious source of moisture such as a water leak. If there is no obvious source of moisture, look for less obvious problems, such as high humidity in a particular area, poor air circulation, or condensation along an outside wall.
- Consult a mycologist to ensure that no toxic mold species are present. If toxic molds are present, **do not** handle any materials yourself.
- Isolate the affected items. Transfer them to an isolation room (this room should have low temperature and humidity, and should not use the same air-handling equipment as collection storage areas). Transfer materials in sealed plastic bags so that other materials are not contaminated during the move.
- Modify the environment so that it is no longer conducive to mold growth. Stop any leaks, remove standing water, and/or bring in dehumidifiers to reduce humidity. Keep the climate well below 70 degrees Fahrenheit and 50 percent relative humidity. Also minimize air circulation, as this can spread mold spores to other areas of the collection. Open and close doors as little as possible, block off air return vents (if possible) so that spores are not spread in the air handling system, and **do not** run fans.
- Decide whether the affected items need to be retained. It may be possible to replace them easily. If they are not of long-term value, it may be possible to discard them.
- **For items that need to be retained, consult a preservation professional before proceeding with drying and/or cleaning.** Even molds that are not defined as toxic can cause people who work with them to develop debilitating allergies. Unfortunately, no standards exist to specify safe or unsafe levels of mold exposure. The severity of health problems depends on the type of mold, the amount of exposure, and the susceptibility of the exposed person. To be protected when cleaning moldy materials, one must wear a particulate respirator that filters 99.97 percent of particles from the air (also known as a respirator with a HEPA filter). The use of respirators in the workplace is governed

by OSHA (Occupational Safety and Health Administration) regulations, which specify the type of respirator to be used in various situations, fit testing procedures, and training procedures. The regulations also require approval from a medical practitioner that the person is physically fit to wear this type of respirator. There may be liability issues if the institution does not comply with these regulations. While repositories that are part of a larger institution with a health and safety office may have the ability to comply with the regulations, smaller repositories are likely to find it more difficult.

- If the institution decides that it is unable to dry and/or clean moldy items that need to be retained, or if mold is discovered on a large amount of material (e.g., in whole stack ranges, drawers, or rooms), it is best to work with a commercial company experienced in dealing with water damage and mold cleanup.
    - If there will be a delay in transferring wet materials to a salvage company, freeze the affected items to avoid further mold damage. They can later be thawed and dried in small batches, or they can be vacuum freeze dried (with the exception of photographs).
- If the institution decides to clean up the mold in-house, following the OSHA guidelines referenced above, the moldy materials will need to be dried (if they are wet) and then cleaned. As noted above, wet and moldy items should be frozen if they cannot be dried immediately. They can later be thawed and dried in small batches. Instructions for drying and cleaning moldy collections can be found in NEDCCs Emergency Salvage of Moldy Books and Paper http://www.nedcc.org//plam3/tleaf39.htm and Managing a Mold Invasion: Guidelines for Disaster Response, http://www.ccaha.org by Lois Olcott Price (Conservation Center for Art and Historic Artifacts, 1996).
- Sterilize the affected storage area(s), and the climate control system if possible.

SALVAGE OF SPECIFIC MEDIA

Following are very basic initial salvage instructions for the types of material found in your collections. The following salvage instructions have been adapted from:

- ☐ Walsh, Betty, Salvage at a Glance, in *WAAC Newsletter* Vol. 19 No. 2 (May 1997) http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-207.html;
- ☐ Walsh, Betty, Salvage Operations for Water-Damaged Archival Collections: A Second Glance, in *WAAC Newsletter* Vol. 19 No. 2 (May 1997) http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-206.html
- ☐ Salvage instructions sheets at the Minnesota Historical Society Emergency Response web site at http://www.mnhs.org/preserve/conservation/emergency.html
- ☐ Fox, Lisa, Disaster Preparedness Workbook for U.S. Navy Libraries and Archives
- ☐ Emergency Response and Salvage Wheel (National Task Force on Emergency Response). See the bibliography for complete citations.

Archival Materials

Documents with stable media should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** separate single sheets. Pick up files by their folders, interleave between folders every two inches with freezer paper, and pack in milk crates or cartons, filling them three quarters full. If it is known from the outset that the records will be vacuum freeze dried, interleaving is not necessary. *Documents with soluble inks (felt pens, colored pens, ball point pen)* should be dried or frozen

immediately. **Do not** blot the surface. Interleave between folders with freezer paper and pack in milk crates or cartons. The documents can be air-dried or vacuum freeze dried.

Art on Paper

Prints and drawings with stable media should be frozen or dried within 48 hours. Air dry or vacuum freeze dry. Dont separate single sheets. To pack, interleave between folders and pack in milk creates or cartons. *Oversize prints and drawings* should be frozen or dried within 48 hours. If they are damp, air dry or vacuum freeze dry. If they are wet, vacuum freeze drying is preferred. Use extra caution if folded or rolled. Pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood.*Framed prints and drawings* should be frozen or dried within 48 hours. If time permits, unframe and pack as for single sheets of paper (see archival materials and manuscripts, above). Once unframed and unmatted, air dry or vacuum freeze dry. Handle with care. Can be packed in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood.*Soluble media (watercolors, soluble inks, and hand colored prints)* should be frozen or dried immediately. Air dry or vacuum freeze dry. **Do not** blot. To pack, interleave between folders and pack in milk crates or cartons.

Audio Recordings, Compact Discs

Immediately air dry discs. Dry paper enclosures within 48 hours. If disks have been exposed to seawater, rinse in clean water immediately. **Do not** scratch the surface. Pack vertically in crates or cardboard cartons. Dry discs vertically in a rack. **Do not** vacuum freeze dry. However, CD cases and paper booklets can be vacuum freeze dried.

Audio Recordings, Tapes and Cassettes

Separate tapes into categories: dry tape, wet boxes only, and wet tapes. If water has condensed inside a cassette, treat the tape as wet. Immediately rinse off tapes soaked by dirty water or seawater. **Do not** unwind tapes or remove them from the reel. If they cannot be dried immediately, keep tapes wet, at their initial level of wetness (e.g., **do not** immerse tapes that are only wet on the outside of the tape pack). Tapes can stay wet for up to 72 hours if necessary, but care must be taken with tapes that have labels with water soluble adhesives and inks, or older tapes that may disintegrate if immersed too long. To pack, keep tapes wet in plastic bags. Pack vertically in plastic crates or tubs. **Do not** freeze magnetic media. Air dry by supporting the tapes vertically on blotting material or lay the reels on sheets of clean blotter. **Do not** touch magnetic media with bare hands. Use fans to keep the air moving, but **do not** blow air directly on the items. If humidity is high, use portable dehumidifiers to slowly bring the humidity down to 50 percent. Dry tapes that have paper boxes and labels within 48 hours if possible; be sure to keep the tapes near their boxes for identification purposes.

Books, General Collection

General books and pamphlets should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** open or close wet books, and **do not** remove book covers. Gently shape closed books to reduce the distortion set into the book on drying. If the water is very dirty, and there is enough time and help, consider rinsing; see the *General Salvage* section above for instructions. To pack wet books, lay a sheet of freezer paper around the cover and pack spine down in a milk crate or cardboard box. Fill boxes only one layer deep. If books have fallen open, pack them as is in cartons or trays, stacking them in between sheets of freezer paper and foam. Oversized volumes can be packed flat in cartons or bread trays, 2-3 books deep. *Books with coated papers* will stick together unless frozen or dried quickly. Freeze them, or keep them wet in cold water until they can be air dried.

Books, Rare

Cloth bindings should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** open or close wet books, and **do not** separate the covers. To pack wet books, lay a sheet of freezer paper around the cover and pack spine down in a milk crate or cardboard box. Fill boxes only one layer deep. If books have fallen open, pack them as is in cartons or trays, stacking them in between sheets of freezer paper and foam. Oversized volumes can be packed flat in cartons or bread trays, 2-3 books deep.*Leather and vellum bindings* must be air-dried under the supervision of a conservator, as they distort and disintegrate in water and are highly susceptible to mold growth. Dry them immediately or freeze them (if many books are involved) until they can be thawed and air-dried. **Do not** open or close wet books, and **do not** remove the covers. To pack them for freezing, separate with freezer paper and pack spine down in a milk crate or cardboard box, filling the box only one layer deep.

Computer CDs/CD-ROMs

If discs have been exposed to seawater, wash them in tap water immediately. Immediately air dry discs. Dry paper enclosures within 48 hours. **Do not** scratch the surface during rinsing or packing. Pack vertically in crates or cardboard cartons.

Computer Disks, Magnetic

First consult with appropriate personnel to determine whether undamaged backups of data are available; if so, salvage may not be necessary. Separate into categories: dry, wet enclosures only, and wet media. If water has condensed inside disks, treat them as wet. Air dry disks; **do not** freeze. **Do not** touch disk surface with bare hands. Keep wet until they can be air-dried, and pack vertically in plastic bags or tubs of cold water.

DVDs

Immediately air dry discs. Dry paper enclosures within 48 hours. **Do not** scratch the surface. Pack vertically in crates or cardboard cartons. Dry discs vertically in a rack. **Do not** vacuum freeze dry.

Film, Motion Picture

If only the outside of the can is wet, dry the container and relabel it if necessary. If the film is wet, fill the can with cold water and replace the lid. Pack into plastic pails filled with cold water or cardboard cartons lined with garbage bags. Arrange with a film processor to rewash and dry within 48 hours.

Maps and Plans

General considerations: For materials in map drawers, sponge standing water out of the drawers. Remove the drawers from the cabinet, ship and freeze them stacked up with 1 inch x 2 inch strips of wood between each drawer. Pack loose, flat maps in bread trays, flat boxes, or plywood sheets covered in polyethylene. Bundle rolled maps very loosely to go in small numbers to the freezer, unless facilities are available for conservators to unroll them. *Stable media* should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. Use extra caution if folded or rolled. Pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Soluble media (maps and plans by reproductive processes and hand-colored maps)* should be immediately frozen or dried. They can be air-dried or vacuum freeze dried. **Do not** blot. Interleave between folders and pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Drafting linens* should be immediately frozen or dried. They are coated with starch and may stick together like coated papers. They can be air-dried by separating sheets and interleaving or vacuum freeze dried. **Do not** blot the surface, and avoid pressureinks can smear away. Pack in containers lined with plasticmap drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood.*Maps on coated papers* should be immediately frozen or dried. Vacuum freeze

drying is preferred. Pack in containers lined with plasticmap drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood.

Natural History Materials

Use a respirator and protective clothing to handle all natural history specimens, as they may contain arsenic or other toxic materials. *Animal study skins and taxidermy mounts* should be air-dried slowly or frozen. They should not be handled directly. *Botanical specimens* should be rinsed only if necessary. Interleave and air dry herbarium sheets, and use presses if possible. *Fluid-preserved specimens* should be placed in sealed polyethylene boxes with a small amount of alcohol. *Geological specimens* should generally be rinsed and air-dried slowly, but consult a conservator, since there are some specimens that should be dried quickly. *Palaeontological specimens* should be rinsed and air-dried slowly. Hold fragile specimens and those with old repairs together with ties during drying. Separate ties from specimens with waxed or freezer paper.

Negatives, Acetate

Acetate negatives in poor condition should be immediately dried or frozen. The recovery rate is low. They should be air-dried, thawed later and air-dried, or vacuum freeze dried. Handle carefully due to swelling of the emulsion. Pack horizontally. *Acetate negatives in good condition* should be frozen or air-dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw later and air-dry, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in small plastic bags inside boxes.

Negatives, Glass Plate

Wet collodion glass plate negatives should be dried immediately. The recovery rate is low. Air dry face up and **do not** freeze. Handle with care, due to glass supports and fragile binder. Pack horizontally in a padded container. *Gelatin dry plate glass negatives* should be frozen or dried within 48 hours. Air drying preferred, or thaw then air dry, or vacuum freeze dry. Handle with care. To pack, keep wet and pack in plastic bags, vertically in a padded container.

Negatives, Polyester

Polyester-based negatives should be frozen or air-dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in small plastic bags inside boxes.

Newspapers

Bound or loose newspapers should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. Pack oversize materials flat.

Objects

In general when air drying, raise items off the floor on trestles, pallets, or lumber to allow air to circulate underneath the items. Sponges, clean towels, paper towels, or unprinted newsprint may be used to absorb excess moisture. Exchange wet for dry blotting material at least daily until items are dry. Check daily for mold growth.Drying of *wood furniture* should begin within 48 hours to prevent mold growth. Wooden objects should be dried slowly, since fast drying can cause irreversible damage. In general, rinse and/or sponge surfaces gently to clean, blot, and air dry slowly. Inspect painted surfaces to identify blistered or flaking paint. **Do not** try to remove dirt or moisture; air dry slowly. Veneer should be held in place with weights or clamps while drying, but be sure to provide a protective layer between the weight and the veneer. Polychromed objects require immediate attention; consult a conservator. Drying of *upholstered furniture* should also begin within 48 hours to prevent mold growth, and these items should also be dried

slowly. Rinse off mud and remove cushions and other removable pieces. Wrap upholstered items in cloths (e.g., sheets, towels) to air dry and replace the cloths as they become damp. Wood parts should be blotted and air dried slowly. *Many ceramics* generally will suffer little damage from short-term exposure to water, but there are exceptions. It is important to identify the type of ceramic and consult a conservator before drying, as procedures can vary. If the ceramic is broken, cracked, or has mineral deposits or old repairs, place it in a clean, transparent polyethylene bag until it can be treated. Seal the bag and monitor it frequently for mold growth. If a *stone object* has a smooth surface, blot it gently and air-dry. If the object has a rough surface or an applied finish, **do not** blot it. Air-dry it on a plastic screen or clean towel. *Metal objects* can be rinsed and/or sponged and blotted, then air dried. If the object has an applied finish, **do not** blot or clean it. Air-dry it and keep any flaking surfaces horizontal.

Organic Materials

Leather and rawhide should be air-dried within 48 hours to avoid mold growth. Handle and move carefully, as leather (especially items with red rot) may be very fragile when wet. Rinse and/or sponge with clean water to remove mud. Drain and blot to remove excess water, and pad with toweling or unprinted newsprint to maintain proper shape. *Basketry* should be air-dried as soon as possible. Handle carefully, as it may be fragile and heavy when wet. Rinse, drain, then blot to remove excess moisture. Pad with clean paper towels or cotton sheets to retain the proper shape and absorb moisture. Cover with clean towels. Change the blotting material when it becomes wet.Air-drying of *bone, hair, horn, shell, and ivory* should begin within 48 hours. Handle carefully as these items may be extremely fragile when wet. Rinse, drain, and blot to remove excess moisture. Air-dry slowly on blotters on non-rusting screens.

Paintings

Air dry immediately. Tilt the painting to drain off excess water, and carry it horizontally to a work area. If you cannot hold it horizontally, carry it facing toward you, holding the side of the frame with the palms of your hands. Two people should carry larger paintings. Carefully remove paintings from frames in a safe, dry place. **Do not** separate paintings from their stretchers. Pack face up without touching the paint layer, and avoid direct sunlight. The order of removal and treatment is: first, the most highly valued; second, the least damaged; third, slightly damaged; and fourth, severely damaged. Consult a conservator for drying techniques.

Photographic Prints, Black and White

Albumen prints should be frozen or dried within 48 hours. They should be air-dried immediately or thawed and air-dried later. **Do not** touch the binder with bare hands. Interleave between groups of photographs with freezer paper. *Matte and glossy collodion prints* should be frozen or dried within 48 hours. They should be air-dried immediately, thawed and air-dried later, or vacuum freeze dried. Avoid abrasion. **Do not** touch the binder with bare hands. *Silver gelatin printing out and developing out papers* should be frozen or dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in plastic bags inside boxes. *Carbon prints and Woodburytypes* should be frozen or dried immediately. They should be air-dried or thawed and air-dried later. Handle them carefully, due to swelling of the binder. Pack horizontally. *Photomechanical prints (e.g., collotypes, photogravures) and cyanotypes* should be frozen or dried within 48 hours. They should be air-dried or vacuum freeze dried. **Do not** separate single sheets. To pack, interleave every two inches with freezer paper and pack in boxes or crates.

Photographic Prints, Color

Dye transfer prints should be air-dried face up immediately. The recovery rate is poor. **Do not** touch the emulsion and transport horizontally.*Chromogenic prints and negatives* should be frozen or dried within

48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** touch the binder with bare hands. To pack, keep wet and pack in plastic bags inside boxes.

Scrapbooks

Scrapbooks should be frozen or dried within 48 hours. If the scrapbook is not boxed and the binding is no longer intact, wrap in freezer paper before freezing. Vacuum freeze drying is preferred, although it should not be used for photographs. If scrapbooks are to be vacuum freeze dried, the photographs should be removed first. Air drying may be used for small quantities that are only damp or water-damaged around the edges. The scrapbooks should not have large amounts of coated paper or soluble adhesives. **Do not** move items until an area has been prepared to receive them. Large scrapbooks must be supported with boards.

Serials

Serials not on coated paper should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** open or close wet volumes, and **do not** separate the covers. To pack them, separate with freezer paper and pack spine down in a milk crate or cardboard box. The box should be filled only one layer deep.*Serials on coated paper* should be frozen or dried immediately to prevent the pages from sticking together. Vacuum freeze drying is preferred, although air drying by fanning the pages and interleaving is possible. **Do not** open or close wet volumes, and **do not** separate the covers. Keep the items wet and pack them spine down in containers lined with garbage bags.

Textiles

Dry textiles with bleeding dyes as quickly as possible. Dry all other textiles within 48 hours to prevent mold growth. Air drying indoors in an air-conditioned area is recommended. If textiles cannot be dried within 48 hours, they can be frozen, but **do not** freeze beadwork or painted/stenciled items. To pack textiles for freezing, separate them with freezer paper to prevent transfer of dyes and pack flat. Handle wet textiles only as necessary since they are fragile; **do not** unfold delicate fabrics that are wet. Rinse, drain, and blot items with clean towels/cotton sheets to remove excess water. Provide adequate support when moving textiles, and **do not** stack wet textiles. Be sure to retain all identifying information, such as labels or tags, with each item. See the Minnesota Historical Society salvage instructions for details on air drying.

Transparencies, Color

Mounted *color slides and chromogenic color transparencies* should be frozen or dried within 48 hours. Drying methods in order of preference are: air dry in mounts if possible, thaw and air dry, or vacuum freeze dry. Handle by mounts or edges. To pack, keep wet and pack in plastic bags inside a box. *Additive color transparencies (Autochromes, Dufaycolor)* have a poor recovery rate because the dyes dissolve. They should be packaged to prevent damage. If they become wet, air dry immediately. **Do not** freeze. Handle carefully due to loose binding tapes and glass.

Videotapes

Immediately rinse off tapes soaked by dirty water. Dry within 48 hours if they have paper boxes and labels. Otherwise, tapes can stay wet for several days. **Do not** freeze. Air dry. **Do not** touch magnetic media with bare hands. To pack, keep tapes wet in plastic bags. Pack vertically in plastic crates or tubs.

REHABILITATION

(The following is adapted from Fox, Lisa, Disaster Preparedness Workbook for U.S. Navy Libraries and Archives, and Wellheiser, Joanna and Jude Scott, An Ounce of Prevention: Integrated Disaster Planning for Archives, Libraries, and Records Centres. See bibliography for full citations.)

Rehabilitation of collections is the process of returning collections to a usable state once they have been salvaged. Once wet collections have been dried, they are not simply ready to put back on the shelf. Depending on the nature and extent of the disaster, the rehabilitation process may be relatively quick and easy, or it may take a great deal of time and money. If there is a great deal to be done, it may be necessary to hire and/or train additional personnel to handle the work. Unfortunately there is no quick or easy way to make rehabilitation decisions; all damaged items must be examined and sorted, and categorized according to their needs. Options for rehabilitation of water-damaged collections include –

- Cleaning Some materials may have been rinsed before being allowed to dry. If dry paper-based collections still have mud or other debris, they can be cleaned by brushing or vacuuming. However, any works of art or other valuable materials need to be cleaned by a conservator. If materials have sewage contamination, they should be discarded or cleaned by a professional.
- Repair and rebinding If trained staff is available, it may be possible to do minor repairs to books and paper documents in-house. If there are a large number of books requiring rebinding, they should be sent to a commercial binder.
- Professional conservation treatment Treatment by a conservator is usually reserved for materials of significant value, due to the high cost of treating individual items. Treatment might include cleaning, removal of stains, rebinding, etc.
- Rehousing/relabeling Water-damaged boxes, folders, envelopes, sleeves, etc. will need to be replaced. Be sure to copy all identification information to the new enclosures. It may also be necessary to replace labels, card pockets, book plates, security tags, and other items.
- Data verification Tapes and disks that have been dried onsite or sent out to a commercial company for recovery need to be checked to verify that the data is readable.

Options for rehabilitation of fire-damaged materials include –

- Cleaning Dry-cleaning can be used to remove smoke and soot deposits. Vacuuming, cleaning with dry-chemical sponges, or dry-cleaning powder and erasers are common methods. Wet cleaning should not be used.
- Odor removal For collections with a residual smoke odor, there are professional companies that specialize in deodorization. Treatment in an ozone chamber will reduce the odor, but ozone is a powerful oxidizing agent that accelerates the aging of paper, so it should not be used on archival or other intrinsically valuable materials. Another possibility is to use storage boxes that incorporate zeolites; these have been shown to be effective in odor reduction. Placing collections in an enclosed container with baking soda, activated charcoal, or kitty litter may also help (these materials should not come into direct contact with the collections, however).
- Recovery of information in charred items In rare cases of collections that are badly charred but very important, it may be possible for a forensic science laboratory to retrieve information from the materials. This treatment is very expensive and would only be justified for unusually valuable items.

- Repair and rebinding As with water-damaged collections, charred items can be repaired and rebound. Charred edges would be trimmed and the volumes rebound, as long as the pages are not too brittle.
- Professional conservation treatment As with water-damaged collections, treatment by a conservator is usually reserved for materials of significant value, due to the high cost of treating individual items.
- Rehousing/relabeling Boxes, folders, and other enclosures that have suffered fire damage will need to be replaced. In addition, items that have suffered fire damage may be very brittle and may need special enclosures to protect them from future damage.

Also remember that additional activities will be required before collections can be returned to the shelves. Catalog records and finding aids will need to be updated to reflect any withdrawals, replacements, or other changes. Furnishings and shelving will need to be cleaned, repaired, and/or replaced. Finally, the collections themselves will need to be reshelved or refiled.

In some cases, rehabilitation of the collections may not be possible due to excessive damage, or rehabilitation may be more expensive than other options such as replacement. Thus, in making rehabilitation decisions, there are several alternatives that must be considered. It may be possible to discard some damaged materials, if they are non-essential or easily replaced. There are several options for replacement: photocopying, microfilming, purchase of a replacement copy, or purchase of a reprint or other edition. It is difficult to plan ahead for specific rehabilitation activities, since it is impossible to know the extent or nature of the disaster in advance. When the time comes to plan for rehabilitation, these general planning issues will need to be considered –

- What specific steps are needed for each rehabilitation activity?
- Who will carry them out?
- Who will supervise the work?
- Where will the work be done?
- Will temporary storage space be needed?
- What kind of work flow makes sense?
- Who will have authority to discard badly damaged items?
- What funds will be available? From the operating budget? From insurance?
- How should rehabilitation priorities be set to allow quick resumption of essential services?
- How much of the work can be done by staff and how much needs to be contracted out?

Building Recovery/Collection Salvage Services

American Freeze-Dry, Inc.
39 Lindsey Avenue
Runnemede, NJ 08078
Telephone: (856) 546-0777

24-Hour hotline: 609-458-0510
Hours: 9:00 a.m. - 5:00 p.m. M-F

American Freeze-Dry is able to vacuum freeze-dry wetted library materials.

Document Reprocessors
5611 Water Street
Middlesex (Rochester), NY 14507
Telephone: (585) 554-4500
Toll Free: (888) 437-9464
24-hr. hotline Fax: (585) 554-4114
URL: http://www.documentreprocessors.com
Hours: 8:00 am - 5:00 pm M-F

Vacuum freeze-drying, disaster recovery of computer media, microfiche and microfilm, books, business records.

Polygon
15 Sharpner's Pond Road, Building F
North Andover, MA 01845
Toll-Free: 1-800-422-6379 (24-hr.)
Telephone: (978) 388-4900
Fax: (978) 241-1215
us_info@polygongroup.com
http://www.polygongroup.com/us/
Hours: 7:30 am - 8:00 pm M-F

Disaster recovery services, building dehumidification, drying services, microfilm drying services

Belfor
Gerry McGonagle, General Manager
138 Bartlett Street
Marlborough, MA 01752
508.485.9780
24/7 Emergency Number: 866.914.0939
http://www.belfor.com/en/USA.aspx
Comprehensive disaster recovery.

Paul Davis Restoration & Remodeling
Milford, ME
207.827.4205
property damage mitigation, reconstruction and remodeling; building only, not collections

Salvage - Electronic Data & Equipment

TechBento, Computer Doctors of Maine, Inc.
477 Congress Street, Fifth Floor
Portland, Maine 04101
207-221-2773
support @ tech bento dot com
Recover data from disaster, errors/accidents, as well as for forensic or evidential purposes.

CW Data Recovery Of Maine LLC
15 West Kennebec Road
Machias , Maine 04654
Phone: 1-207-255-8220
Fax: 1-207-207-0596
E-Mail: info@cwdatarecovery.com
Recovery of lost files, photos, projects and business operations data when the hard drive crashes, there has been an accidental deletion, fire or flood damage and or hardware failure.

Excalibur
5 Manor Pkwy
Salem, NH 03079
Toll Free: (800) 466-0893
Telephone: (603) 458-5736
Email: excaliburdr@rcn.com
http://www.excaliburdatarecovery.com/

A computer recovery service that can recover data from loss caused by many types of disaster. They have experience working with many types of media and more than twenty operating systems.

Salvage - Magnetic Media

SPECS Brothers
P.O. Box 195
Lodi, NJ 07644
Toll free: 800-852-7732

Email: admin@specsbros.com
URL: http://www.specsbros.com
Magnetic tape (audio, video and data) decontamination and restoration facility that specializes in disaster recovery and the rejuvenation of archival tapes suffering from material breakdown

Professional Preservation Advice – Conservators

Name/Organization:	**Tuckerbrook Conservation**
Contact:	Ronald Harvey
	2498 Belfast Road
	Lincolnville, ME 04849
Phone:	207-763-3973
After hours phone:	207-763-3973
Web site:	
Specialty:	objects

Name/Organization:	**Teresa Myers Conservation Services**
Contact:	Teresa Myers
	26 Frandy Lane
	Sebec , ME 04481
Phone:	(207)564-3910
After hours phone:	
Web site:	http://www.myersconservation.com/
Specialty:	objects

Name/Organization:	**Head Tide Archaeological Conservation Laboratory**
Contact:	Molly OGuinness Carlson
	35 Sheepscot Shores Road, Suite A
	Wiscasset, ME 04578
Phone:	207-882-9078
After hours phone:	
Web site:	mollyocarlson@gmail.com
Specialty:	archaeological material

IN-HOUSE SUPPLIES - Basic Disaster Supply Kit

Item	Location(s)
Aprons, plastic	
Book trucks, hand carts	
Brooms and dustpans	
Buckets (plastic)	
Camera	Basement
Dehumidifiers, portable	Basement
Extension cords (50 ft., grounded)	Basement
Fans, portable	Arts Center closet
Freezer bags (polyethylene)	
Garbage bags, plastic (30 or 42 gallon)	Basement
Gloves (nitrile)	
Markers (waterproof)	
Masks, protective	
Milk crates/Rescubes	
Mops	
Paper - absorbent white blotter paper (used for drying loose papers)	
Paper - uninked newsprint (used for interleaving wet materials)	
Paper towels	
Plastic sheeting, heavy (polyethylene)	
Scissors	
Sponges celluose	
Tape (clear, 2 inches	
Tape (duct)	
Tape (yellow caution)	
Utility knife	
Waxed or freezer paper	

Additional Supplies

Item	Location(s)
Boxes, cardboard	
Bubble wrap	
Clothespins	
Glasses (protective)	
Hard hats	
Labels, self adhesive (even when wet)	
Sponges, dry chemical (removing soot)	
Sump pump (portable)	
Tables, portable folding	
Tags with twist ties	
Trash cans	

External Sources for Supplies

Item	Local Supplier	Alternate Supplier Contact
Aprons, plastic	Grainger	Fisher Scientific/Fisher Safety
Book trucks, metal		Grainger
Boots, rubber	Tractor Supply	Grainger
Boxes, cardboard	Norumbega Moving Strg	Staples
Brooms/dustpans	Paradis True Value	Hammond Lumber, Town Hill
Buckets, plastic	Paradis True Value	Hammond Lumber, Town Hill
Clothesline (nylon or 30 lb. monofilament)	Paradis True Value	Hammond Lumber, Town Hill
Construction materials (wood, screws, nails)	Hammond Lumber	
Dehumidifiers, portable	Grand Rental Station	
Dry ice	Eastern Mold Remediation	Getchell Brothers
Extension cords (50 ft, grounded)	Paradis True Value	Hammond Lumber, Town Hill
Fans, portable		Sunbelt Rentals
Freezer bags, polyethylene (various sizes)	Hannaford	
Freezer or waxed paper	Hannaford	
Garbage bags, plastic (30 or 42 gallon)	Hannaford	Paradis True Value
Generator, portable	Grand Rental Station	Sunbelt Rentals
Glasses, protective	Paradis True Value	Hammond Lumber, Town Hill
Gloves (leather work gloves)	Paradis True Value	Hammond Lumber, Town Hill
Gloves (nitrile)	WalGreens, Carroll Drug	Grainger Industrial Supply https://www.grainger.com/
Hard hats	Hammond Lumber	Grainger
Ladders	Hammond Lumber	
Lighting, portable	Grand Rental Station	
Milk crates, plastic or Rescubes	Home Depot	

Item	Local Supplier	Alternate Supplier
Mops	Hannaford	Paradis True Value
Paper towels	Hannaford	
Paper absorbent white blotter paper (used for drying loose paper materials)	University Products	Dick Blick
Paper uninked newsprint (used for interleaving wet materials)	Ellsworth American	Dick Blick
Plastic sheeting (heavy)	Paradis True Value	EBS
Protective clothing, disposable		Grainger
Pump, portable	Hammond Lumber	
Respirators	Paradis True Value	Hammond Lumber
Sand bags	Paradis True Value	Hammond Lumber
Sponges (cellulose)	Paradis True Value	Hammond Lumber
Sponges, dry chemical (for removing soot)	Paradis True Value	Grainger
Tables, portable	GCIHS	Grand Rental Station
Trash cans	Paradis True Value	Hammond Lumber
Truck, refrigerated	Ryder	Penske
Wet/dry vacuum	Hammond Lumber	Paradis

External Suppliers - Restoration/Remediation

Materials & Supplies - Local

Name/Organization: **Paradis True Value**
Contact:
31 Holland Ave
Bar Harbor, ME 04609
Phone: 207-288-4995
Type of Materials: hardware, household

Name/Organization: **Hammond Lumber**
Contact: 1513 State Highway 102
Bar Harbor, ME 04609
Phone: 207-288-9756
Type of Materials: hardware, household, building supplies, lumber

Name/Organization: **Ellsworth American**
Contact: 30 Water Street
Ellsworth, ME 04605
Phone: (207) 667-2576
Type of Materials: **blank newsprint**

Name/Organization: **Hannaford**
86 Cottage St
Bar Harbor, ME 04609
Phone: (207) 288-5680
Type of Materials: food, groceries, cleaning supplies, health & safety

Name/Organization: **Walgreen**
34 Cottage Street
Bar Harbor, ME 04609
Phone: (207) 288-2222
Type of Materials: gloves, health & safety, cleaning supplies

Name/Organization: **Staples**
1131 Union St.
Bangor, ME 04401
Phone: 207.941.2182
Type of Materials: office supplies, computers, electronics, packing supplies

Materials & Supplies – Non-local

Name/Organization: **Dick Blick**
P.O. Box 1267
Galesburg, IL 61402
Phone: 1-800-828-4548
Type of Materials: paper

Name/Organization: **Grainger**
425 Warren Ave.
Portland, ME 04103
Phone: 1-800-Grainger
Type of Materials: facilities management, health & safety, cleaning, moving equipment

Name/Organization: **University Products**
517 Main Street
Holyoke, MA 01040
Phone: 800.628.1912
Type of Materials: archival supplies

Name/Organization: **Fisher Scientific/Fisher Safety**
http://www.fishersci.com/ecomm/servlet/home
Phone: 1 800-766-7000

Moving Equipment & Truck Rentals (incl. freezer trucks)

Name/Organization: **Norumbega Moving & Storage**
Contact: Rich Evangelista
P.O. Box 090
Southwest Harbor, 04679
Phone: 207.244.7295
Type of Materials: moving equipment

Name/Organization: **Penske**
65 Carey Circle
Hamden, ME 04444
Phone: 207-942-7526
Type of Materials: truck rental

Name/Organization: **Ryder**
57 Freedom Parkway
Bangor, ME 04401
Phone: 207-848-2831
Type of Materials: truck rental

Dry Ice

Name/Organization: **Getchell Brothers**
1 Union Street
PO Box 8
Brewer, ME 04412

Phone: 207-989-7335 or 800-949-4423
Type of Materials: dry ice

Equipment Rental

Name/Organization: **Grand Rental Station**
350 Bar Harbor Road
Trenton, Maine 04605
Phone: 207-667-1700
Type of Materials: Generators, equipment rental, portable HVAC equipment, tents

Name/Organization: **Sunbelt Rentals**
1216 Hammond Street
Bangor, ME 04401
Phone: (207) 945-5635
Type of Materials: equipment rental, portable HVAC equipment, generators

ADDITIONAL RESOURCES FOR SALVAGE OF SPECIFIC MEDIA

Albright, Gary, Emergency Salvage of Wet Photographs, in Preservation of Library and Archival Materials: A Manual, edited by Sherelyn Ogden. Andover, MA: Northeast Document Conservation Center, 1999. Available online at http://www.nedcc.org//plam3/tleaf38.htm.

Buchanan, Sally, Emergency Salvage of Wet Books and Records, in Preservation of Library and Archival Materials: A Manual, edited by Sherelyn Ogden. Andover, MA: Northeast Document Conservation Center, 1999. Available online at http://www.nedcc.org//plam3/tleaf37.htm.

Conservation Center for Art and Historic Artifacts. *Managing a Mold Invasion: Guidelines for Disaster Response*. Technical Series No. 1. Philadelphia: Conservation Center for Art and Historic Artifacts, 1996. Available at http://www.ccaha.org.

Conservation Center for Art and Historic Artifacts. *Disaster Recovery: Salvaging Photograph Collections*. Philadelphia: Conservation Center for Art and Historic Artifacts, 1998 Available at http://www.ccaha.org.

Conservation Center for Art and Historic Artifacts. *Disaster Recovery: Salvaging Art on Paper*. Philadelphia: Conservation Center for Art and Historic Artifacts, 2000. Available at http://www.ccaha.org.

Conservation Center for Art and Historic Artifacts. *Disaster Recovery: Salvaging Books*. Philadelphia: Conservation Center for Art and Historic Artifacts, 2002. Available at http://www.ccaha.org.

Balloffet, Nelly. *Emergency Planning and Recovery Techniques*. Elmsford, NY: Lower Hudson Conference, 1999. Available at http://www.lowerhudsonconference.org. *See Section 4: Recovery for*

information on salvaging books, documents, maps, art on paper, parchment, leather, film, computers, magnetic tape, paintings, textiles, wooden objects, and furniture.

Interactive Emergency Response and Salvage Wheel, available at
http://www.fema.gov/ehp/ers_wl.shtm.
This information is from the Emergency Response and Salvage Wheel, a sliding chart designed for archives, libraries, and museums. It is also a useful tool for home or business and is available in English and Spanish versions. The Wheel was produced by the Heritage Emergency National Task Force, a public-private partnership sponsored by FEMA and Heritage Preservation. For further information or to order the Wheel, call toll-free 1-888-979-2233.

Minnesota Historical Society Emergency Response web site, at
http://www.mnhs.org/preserve/conservation/emergency.html.
Detailed salvage instruction sheets are provided for the following types of objects:
Archaeological artifacts
Books: Cloth or Paper Covers
Books: Leather or Vellum Covers
Disaster Salvage Tip Sheet
Inorganics: Ceramics, Glass, Metals, Stone
Leather and Rawhide
Magnetic Media: Computer Diskettes
Magnetic Media: Reel-to-Reel Tapes
Microfiche
Microfilm and Motion Picture Film
Organics: Bone, Hair, Horn, Ivory, Shell
Paintings on Canvas
Paper: Coated
Paper: Framed or Matted, Preparation for Drying
Paper: Uncoated
Photographs and Transparencies
Record Albums
Scrapbooks
Textiles and Clothing
Textiles: Costume Accessories
Vellum and Parchment: Bindings and Documents
Wood

National Park Service.***Conservograms*.** Available at
http://www.cr.nps.gov/museum/publications/conserveogram/cons_toc.html.
See the section on Emergency Preparedness, which includes the following:
21/1 Health and Safety Hazards Arising from Floods
21/2 An Emergency Cart for Salvaging Water-Damaged Objects
21/3 Salvage of Water-Damaged Collections: Salvage at a Glance
21/4 Salvage at a Glance, Part I: Paper Based Collections
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21/6 Salvage at a Glance, Part III: Object Collections
21/7 Salvage at a Glance, Part IV: Natural History Collections
21/8 Salvage at a Glance, Part V: TextilesPatkus,

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