After Floyd: Reaching Out to Help Flood Victims Recover Precious Possessions

by *Elizabeth H. Smith*

Staff members at East Carolina University's (ECU) Joyner Library became rescuers following Hurricane Floyd. They reached out to help people in eastern North Carolina save precious possessions that had become victims of vicious floodwaters. Joyner Library staff logged hundreds of hours of community service after the flooding. Many of those hours were in the library where Preservation and Conservation Department staff worked frantically to process wet materials before the onset of mold. Many months after the flood, people were still bringing water-damaged materials to the library to see if Preservation and Conservation staff could dry, clean, or return them to a usable state. The first recovery jobs were successful; however, many more flood-damaged books must be dried. It will be years before the recovery process is complete.

For more than ten years library staff had participated in training sessions such as the Southeastern Library Network's (SOLINET) Disaster Preparedness & Recovery Workshop. In addition, a leak in the North Carolina Librarian's office and a flood in the server room during building construction gave the Disaster Committee practice in recovering wet materials. Training workshops gave a general understanding of salvage operations that helped in planning recovery procedures, while on-the-job practice helped in refining techniques. Joyner Library was not flooded by Hurricane Floyd, so staff members became an active recovery team to assist citizens and institutions.

The Storm

Even before Hurricane Dennis made a return visit to eastern North Carolina in September 1999, Hurricane Floyd was being described as a monster storm. Six inches of rain had already fallen during the week that Dennis simmered off the coast of North Carolina. When it was predicted that Floyd would make a direct hit on Greenville, Joyner Library's Disaster Committee began planning for yet another hurricane. We pulled out the hurricane preparedness memos, last used when Hurricane Bonnie hit Greenville in 1998, and made adjustments as needed. (See Inset 1.) Library staff were reminded to turn off and unplug computers and other electrical equipment before leaving work prior to the storm. Since there are so many windows in the new building, staff members were encouraged to move materials away from the window areas.

There was growing concern as the storm neared Greenville. East Carolina University classes were canceled and the governor encouraged state employees to leave work in order to secure their homes. Hurricane Floyd arrived as predicted dumping 15" of rain in 24 hours. The wind did not seem so fierce, but the rain was incredible as it blew horizontally for many hours.

Inset 1

From: Building Manager
Head of Systems Department
To: Library Staff
Subject: Hurricane Preparedness
Date: September 15, 1999 8:36 AM

Now that we are anticipating the appearance of Hurricane Floyd, we would like to review the in-house instructions for preparing computer and electronic equipment.

WHAT TO DO BEFORE YOU LEAVE FOR THE DAY

1) Shut down and power off all computers and printers in your department. Unplug surge protectors. Do NOT un plug data connections from drops.

2) Unplug the power connector on your phone. On the bottom of your phone is an RCA mini plug (one prong, looks like what is on your walkman earphones).

3) Unplug anything else, like copiers, coffeepots, microwaves, or typewriters. Do NOT unplug refrigerators.

4) Close all window blinds in the UP position.

Any questions - let us know.

From: Disaster Committee Chair
To: Library Staff
Subject: Hurricane
Date: December 15, 1999 9:00 AM

Please take time to review the "Natural Disasters" page in the Staff Emergency Procedures in preparation for the hurricane conditions that are coming our way. Disaster Committee members should make certain they have a copy of the Call Tree (p. 1 of the Procedures) at home.

Since we do not know if new leaks will appear with this storm, please remove all materials from window areas.

As with other hurricanes, the sun shone brightly the day after the storm, and people in many sections of Greenville were picking up debris and even cutting their lawns. However, in some areas the days following Floyd were quite different because of rising water from rivers, creeks, and streams. Greenville was placed under a curfew as water invaded homes and businesses so quickly that many people were forced to evacuate with nothing but the clothes they were wearing. Some people were even rescued from rooftops and trees. Greenville became an island as water covered the airport and part of every road leading to and from the city. ECU was closed for two weeks while the campus dried out, and as people helped their flooded friends and neighbors assess property damage and adjust to their losses.

Know how to contact staff in case of an emergency

After Hurricane Floyd, we realized how little we knew about our co-workers; department heads did not know how to contact some staff members at home. The telephone lists in the library disaster plan included only department heads and disaster committee members. It was not until ECU employees returned to work twelve days after the storm that we learned how many had lost their homes or sustained flood damage. It took several more weeks to determine how many ECU students had suffered losses.

Faculty and staff convocations were held the second day back at work. ECU administrators reviewed the damage to campus, suggested ways to assist those who had suffered flood losses, and announced the formation of the ECU Outreach Network (ECU-ON) to assist flood victims throughout eastern North Carolina.

ECU-ON actually reinforced some of the work that had been done through the Preservation and Conservation Department of Joyner Library. Public preservation education programs had been held in several locations, and the department had served as a regional center for preservation and conservation assistance. Two grants from the Department of Cultural Resources had supported a Preservation of Family Documents Workshop Series, which reached people throughout eastern North Carolina. Through those outreach programs, many people learned that there might be some hope for water-damaged materials. While the university was closed, people began calling to find out if Preservation and Conservation staff could assist with flood-damaged materials.

Volunteers are readers

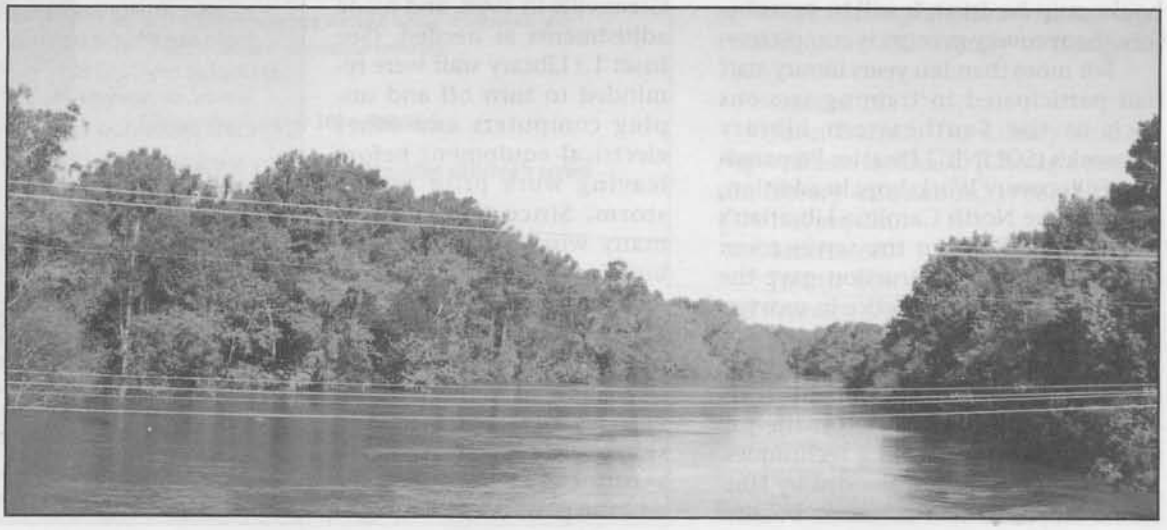
I went to Joyner Library several times during the flood to monitor the temperature and humidity inside the building, to check the operation of the Wei 'To Book Freezer/Dryer, and to pick up book sale items to be donated to the Red Cross. After completing Red Cross Shelter Operations training just three weeks before the flood, I had arranged for some book sale items to be donated. Ironically, the first donations had been delivered to my office the day before the storm.

I had learned while working at a Red Cross shelter, however, that books and Bibles will come to the shelter along with donations of toys, clothing, and food. I had also worked with Red Cross volunteers at my church where a denominational mass feeding operation prepared more than 170,000 meals following the flood. The Red Cross volunteers, who had been sent to Greenville from as far away as Hawaii, had some free time while waiting to deliver meals to flood victims. Many of them had finished reading every book they had brought with them. So, on one of my trips to the library, I picked up the box of books intended for disaster victims and donated them to the volunteers. I also gathered information about the genealogical sources in the North Carolina Collection of Joyner Library for one volunteer from Mississippi who was hoping to find time to research family from eastern North Carolina.

Monitor closed buildings

Of most concern to me during the time that the library was closed was the temperature and humidity in the building. It had been less than two years since mold was discovered in a remote storage facility. Those books had been cleaned and returned to Joyner Library where normal environmental conditions of 68° – 70°F and 40% – 43% RH (relative humidity) should prevent another mold outbreak. Air continued to circulate in the building, but the temperature remained at 78°F. I learned later that low water pressure due to a problem with the pumping facility near the river, had forced ECU to turn off the library chillers. The library was fortunate to have even warm moving air, however, because the circulation prevented mold from forming. Some libraries in the area did have mold outbreaks after the storm because their climate control systems were turned off while the facilities were closed.

Greenville Utilities employees worked around-the-clock to prevent floodwaters from shorting out transmission lines at Greenville's single point of delivery for electric power. When floodwaters rose within inches of the main insulators, power was turned off for 24 hours. It was not a great concern that the library lost power for this period because the book dryer was operating only



Greenville Utilities employees worked around-the-clock to prevent rising floodwaters from shorting out transmission lines at Greenville's single point of delivery for electric power. Photo courtesy Gary Weathersbee.

in an experimental cycle. During the August school break, I had wet some discarded books and started them on a trial recovery cycle as a refresher course in operating the equipment.

Be prepared to answer many questions

Spending almost two weeks away from the library during this major disaster was not a restful time for anyone. Since the university was closed, and the few students remaining in a dormitory had to be evacuated when the power was turned off, Greenville was almost like a ghost town. It was easy to tell where water had invaded because there were dirty water stains on buildings; trash was piled in yards; and windows and doors were open on days when air conditioning was needed.

I returned to work to find many e-mail and voice-mail messages inquiring about the library. The library building had escaped with only some familiar leaks and the loss of some books that were checked out to flood victims. However, other buildings and equipment on campus had sustained millions of dollars in damage from floodwater.

The most pressing call for help came from someone whose father had a 20,000-volume home library that had sustained water damage. It was not floodwater because he lived on a hill; however, even an engineer could not explain how the water had invaded the home. The moisture had caused a severe mold problem in the book collection that contaminated the air throughout the house. The homeowners had made the environment even more conducive to mold by turning off the air conditioner.

The mold was so severe that I recommended contacting Munters Moisture Control Services,[1] the company that had assisted in the library's mold abatement project. A Munters representative, who was already in the area, arrived at the house within 30 minutes after the call. The moisture control company provided a dehumidifier to control mold growth.

The return trip to Greenville made it clear that there was still flooding nearly two weeks after the hurricane. We were forced to take unmarked detours because water was rushing across the road we had traveled earlier in the day. We were glad to get back to work that day!

Another call for help that was beyond our service capacity was from a business with 40 file cabinets of wet business records. Likewise, I referred them to Munters and also advised discarding all nonessential records. I learned from the Munters representative that critical items such as payroll records could be shipped for priority processing and would be returned within 10 days.

A photograph of the book dryer that appeared on the ECU Web site <http://www.ecu.edu> and references to the Preservation and Conservation Department in local and state newspaper articles prompted additional calls for assistance. A faculty member called to inquire about an article in her local paper that recommended sprinkling cornstarch or talcum powder in wet books to absorb the moisture. I vetoed that suggestion because a local school library had asked for help after baking soda had been sprinkled in books to absorb odor. The mess in those books convinced me that sealing musty materials in a container with activated charcoal[2] is much neater and does a better job of eliminating odors.

At the time of the flood, we were near the end of a successful project to eliminate odor from the paper enclosures of CDs that were a gift to the Music Library. We had removed the program notes from the plastic cases and stacked them loosely in a plastic storage container with activated charcoal cartridges. After one month no odor could be detected and the papers and CDs were placed in new plastic cases.

In addition to the calls for help, we heard from people who just wanted to know if they were doing the right thing with their books, papers, photographs, slides, microfilm, and other wet possessions. One person called for advice on air drying his slightly damp paperback book collection. He had already set up boards across sawhorses in his garage and placed the books flat on the boards. A ceiling fan would maintain air circulation to speed the drying process and to prevent mold that would most certainly grow in stagnant air. He was doing all of the right things to dry his collection, so the only advice I gave him was to turn the books over occasionally to keep the covers from curling.

The person with the 20,000-volume home library continued to have questions for several days after our site visit. The books that had been on the lower shelves of the library (just four inches from the floor) were so mold-ridden that it was not feasible to consider salvage. Since he had insurance to cover the loss, I suggested that he remove the title pages and seal the moldy books in trash bags for discarding. Removing the damaged volumes stopped the spread of mold to other books in the collection and made the remainder of the house safer for the family. When wet, mold-damaged books are not valuable enough to undertake a recovery project, the best solution is to discard those books and concentrate efforts on saving less damaged materials.

It was difficult to see someone struggle to deal with the loss of part of

Preservation and Conservation staff (Gloria Bradshaw, Linda Daniels, and Elizabeth Smith) prepare flood-damaged materials to be placed in the freezer/dryer. Library staff member Lorre Bullock, who brought a family Bible to be dried, watches the recovery process. Photo courtesy Leanne Smith.

his library, collected over 60 years. The collection might not have been worth a tremendous sum, but there was value in some of the complete collections of authors' works. Our work with this family included educating them about the dangers of being exposed to active mold, telling them about ways to dry the undamaged portion of the book collection with dehumidifiers and the central system in the house, and suggesting ways to document ownership by taking photographs and retaining the title pages of discarded wet books.

Church record books receive special treatment

Another call for assistance came from some members of the Friends of Joyner Library at ECU who had attended our preservation outreach programs. While ECU was closed, they had called other libraries requesting help with some flood-damaged church record books dating from 1840. They had received excellent advice to wrap the books individually in freezer paper and place them in a freezer. This prevented mold from growing on the books and kept them in a stable condition until recovery efforts could begin. After the library opened, they brought the books to Greenville in the trunks of their cars.

When they arrived at the library, the books had thawed enough for the freezer paper to be removed without damaging the bindings. Every edge of the paper had been sealed with tape. The care that had been taken to wrap the books showed how much the church members valued their record books. Since the books were frozen solid, it was not possible to examine the pages; however, the nature of the contents mandated that we concentrate on saving the contents first and the bindings second. All Preservation and Conservation staff members were recruited to process the books for the freezer/dryer.

Since the books were already frozen, the drying process could begin immediately. After the books had been drying for one month, we were able to open some of them enough to see that most of the writing was still legible. Only those entries that had been made in washable ink had faded. Two dry books were removed after five months, one was removed after six months, and a fourth book was removed after eight months. Some of the bindings survived very well in the freezer while others will have to be replaced.

The Freezer/Dryer dries books slowly

The temperature in different parts of the freezer/dryer normally ranges from –56°F to 30°F with an average temperature of 27°F in the freezer compartment. Once a month we remove the books to check how much they have dried. As books dry, they can be opened and sheets of Reemay[3] can be inserted between some of the pages to speed the drying process. This material can also be used to support wet paper. By placing a sheet of Reemay on a stack of wet papers, one can pick up a page and turn it over onto the sheet. The material will support the wet page and also allow air to circulate under the paper for faster drying. A second sheet of Reemay and a light weight, such as a sheet of heavy paper or pamphlet binder board, can be placed on top of the Reemay/paper layers. Paper can also be pressed after drying or it can be photocopied if only the information is to be saved.

The third monthly inspection of the books was held just before the two-week Christmas break. To our alarm, two of the books had spots of mold on their front covers. How could mold have formed in below-freezing temperatures with two compartment fans running on high? Since only two of the books had mold, we concluded that it must have formed on those books before they were frozen. It was only after the bindings had begun to dry that the inactive mold became visible. Since we were scheduled to be away from the library for two weeks, the books were returned to the freezer to guard against mold growth.

A fire outside the building can affect materials inside the library.

Just before the next scheduled check on the books in January, a faulty switch caused an outside transformer to burn and the library lost power for nearly 24 hours. The building was evacuated and remained closed until the next day. After returning to work, we checked the books in the freezer. To our horror, the books on the top shelf that could be opened before Christmas were frozen shut! What had happened? We concluded that during the power outage the books had gone through a meltdown and the nearly dry books had absorbed moisture from inside the freezer.

A check of the freezer showed the temperature of the air coming from the evaporator to be –59°F, the coldest ever recorded for the unit. All of the readings were too cold for book drying and the average temperature in the compartment was 15°F, not the 27°F normal reading. The optimal compartment temperature for drying is a few degrees below freezing. Initially, we had thought that a power surge during the transformer fire might have caused the temperature controllers to lose their settings, so the freezer was turned off and restarted in the proper sequence. When the readings did not return to their normal levels, the temperature controller was reset from –40°F to 20°F. This setting should have kept the compartment temperature above 20°F, but the readings remained near 15°F. We theorized that the fire had damaged the temperature controllers, and called for service.

Elizabeth Smith places a Bible in the freezer/dryer. Photo courtesy Cliff Hollis, ECU News Bureau.

Meanwhile, the compartment temperature needed to be close to 27°F so that drying could continue until the service technician came. The only solution was to experiment with the fan speeds, lights, and door frame heater control to see if a compartment temperature near 27°F could be achieved. To our surprise, it was possible. The speeds of the front and back compartment fans were adjusted from medium to low, the fluorescent compartment light was turned on, and the doorframe heater control was adjusted from 40° to 50° to provide more heat. This combination resulted in a compartment temperature of 26°F allowing drying to resume.

Freeze or refrigerate water-damaged materials to prevent mold growth

Another call for assistance came from a family that was storing several family collections when a dam broke and sent floodwaters into the lower level of their home. These collections of 60 years included postage stamps, stamped envelopes, coins, and currency. Members of the family had some preservation knowledge and had placed the collections in a freezer to prevent mold growth. They arrived at the library with several coolers filled with coins and currency in plastic and paper boxes, stacks of drawers filled with postage stamps, and boxes filled with stamped envelopes.

The paper boxes and enclosure papers were ruined, but all of the plastic boxes could be opened enough to allow air circulation for drying. Since there were so many stamps and coins, we kept them in the departmental refrigerator until staff members could separate them for drying. We layered the currency between sheets of Reemay to be dried flat. What seemed like a million postage stamps had to be handled individually. Using small spatulas, we separated the stamps and laid single layers on large sheets of Reemay. These sheets were layered in oversize bakery pans that had been purchased several years earlier for just such a drying project. This arrangement for drying also kept similar stamps together, as the family had cataloged them.

We did not have enough space or drying supplies to process everything at the same time. Stacks of stamps and envelopes dried overnight and were then layered in boxes between sheets of paper. All stamps of the same kind were placed together to make sorting much easier. Prior to the flood, the family had planned to sell the marketable collections and donate the proceeds to the library. Organizing the collections helped in determining if the materials still had some value.

Approximately two months after the flood, all of the stamps, envelopes, and coins were returned to the owners. The family had done a good job as "first responders" in preventing damaging mold. Since they had placed the collections in the freezer and had separated many items with paper towels, we were able to dry all of the collections rather than having to discard them.

Ask the owner of water-damaged materials to make decisions about discarding

At least one ECU faculty member had time to plan ahead because her flood-damaged materials were in storage near the airport. It took two weeks for floodwaters to recede enough for her to get to her storage unit. After ECU opened, she called to inquire if we could help whenever she was able to remove her wet materials from storage.

The first load included books, a high school diploma, yearbooks, and art prints. We worked hurriedly to rinse the materials and get them in the freezer or spread them flat for air-drying before mold began to grow. The smell of the brown slime that covered every surface was overpowering. We wore masks, gloves, and goggles and kept several fans running to help dissipate the odor. Lysol

sprayed behind the fans carried a deodorizing aroma through the air and made the work area a little more tolerable. This collection was difficult to process because library staff felt some of the books should have been discarded.

When the faculty member called about bringing a second load, we asked that she plan to stay at the library for a while to help determine if any of the books could be discarded. This was an excellent idea. The owner washed the books under running water and decided to discard more than half of them because they were popular titles that could be replaced. Her decision to discard made the salvage process more manageable. We had learned with trial runs that wet books dry much faster with the covers removed. Since the owner was there to help make decisions, we were able to remove some covers and air dry the cloth. Cover boards would be replaced after the texts have dried.

Some photographs can be salvaged after being in water for several weeks

The salvage rate of photographs in one collection was good because they were brought to us very soon after they had been removed from the floodwaters. Almost all of the photos dried well and all of the mementos were saved. Even a file of legal papers was separated to air dry. Once again, washable ink caused damage in this collection. A birth announcement written in washable ink faded onto a baby picture; however, we scanned the photo and removed the ink stain images.

We were not as successful, however, in recovering some family photo albums that had remained at a flooded retirement home for several weeks. Residents had been evacuated to another town and could not remove their possessions for several weeks after the floodwaters receded. Very few of the color photos could be saved. In many of the photos, the color had run or the emulsion lifted from the paper when the plastic page cover was moved. Other color photos had a crackled glaze finish; however, the floodwaters did not damage many of the older black and white photos. We removed them from the album, rinsed them under running water, and laid them out to dry. As they dried, some of the photos curled, but they were later pressed between layers of Reemay.

It was more difficult to remove photos from magnetic albums; however, the colors survived better than in the pocket style pages. The magnetic pages were sealed around the edges and kept water from penetrating the emulsion, while pockets held water and caused the emulsion to run from the photographs.

Coated pages can be salvaged if they are frozen within a few hours

All materials, except the books, have been dried and returned to the faculty member whose storage unit was flooded. We expect the books to dry successfully because they were pressed and frozen within hours after being removed from the floodwater. Since we could turn the pages of the yearbooks, we feel those pages will separate after drying. Coated pages adhere to one another within six hours of getting wet or being removed from water. The sooner they are frozen, the greater the chances for recovery.

Several years before the flood, we had a 100% recovery rate for a collection of books with coated pages because the owner had wrapped the books in wax paper and placed them in a freezer until they could be brought to the library for freeze drying. We also saved the dust jackets for those books. When the books dried enough, we removed the jackets and pressed them between sheets of Reemay for air-drying. After the books were removed from the freezer, the jackets were shaped around the covers.

Disaster preparedness training for library staff was the best preparation for meeting our needs after the flood.

Know where freezer space might be available

As the wet books continued to come in after the flood, we knew more freezer space would be needed as a holding area until they could be moved into the freezer/dryer. Books were pressed between acrylic sheets, packed in plastic storage cartons, and moved to a rental freezer truck that was parked next to the student center. The books were later moved to a freezer in the basement of the student center next door to the library where they will remain until they can be placed in the freezer/dryer.

Disaster training is a valuable investment

Disaster preparedness training for library staff was the best preparation for meeting our needs after the flood. Since we knew basic recovery processes for water-damaged materials, we were able to organize salvage procedures quickly as each collection was received. The most important step was to label each item or collection. We already had an appropriate information form, but the copies were on colored paper. Any form used with wet materials should be on white paper that will not stain, and writing should be done in pencil. Even though our Disaster Committee had been trained in the salvage of water-damaged materials, they were not recruited to assist with recovering the flood-damaged materials. The staff of Preservation and Conservation could process all that we had room to distribute for drying each day; however, if it had been necessary to ask for assistance, new people would have been assigned to work with someone who already had experience on the project.

Many flood-damaged books can be replaced

Just as an outside fire can affect the library, a flood can have a profound effect on library materials. Soon after students and faculty returned to campus, reports of water-damaged or lost books began coming to the library. Preservation and Conservation was involved in this flood recovery because it is our responsibility to determine if damaged books will be repaired or replaced. Months after the flood, the library was still processing claims for flood-damaged books. Of the 119 books reported damaged or lost during the first six months, 100 were replaced.

ECU's risk management office submitted a claim to the Federal Emergency Management Agency (FEMA) and to the North Carolina Department of Insurance. The processing costs from the library insurance valuation were included in the replacement cost of the books. All available titles were ordered and invoices were coded "FLOYD" so they could be easily identified. We were surprised to learn that several of the out-of-print books could be replaced so easily by searching the Internet at <http://www.bookfinder.com>.

The experience with online searching prompted me to suggest that the library acquire a credit card so that

an order can be placed online as soon as an out-of-print title is located. The credit card will eliminate duplicate searching and also assure that some titles can be acquired while they are still available. Service was fast through the online companies and the condition of the books was just as good as the description. Books that had circulated recently were good candidates to be replaced, so there was some urgency to find other copies. Another title on the subject was sometimes ordered if a duplicate title could not be located. We also found that some titles not available online initially might be found during a subsequent search.

Update the list of home phone numbers regularly

Following the flood, we asked each department head to keep an up-to-date list of staff home phone numbers and to have a copy of the list at home. Radio and TV, as well as the ALERT button on the ECU home page, are places one can turn for emergency information, but we learned after the transformer fire that staff members did not always get the latest information. We also updated our disaster procedures with instructions for sending information to the ECU Emergency Hotline. In the future, emergency announcements for library staff will be included on the library phone message line that normally gives the hours of operation.

Preservation education is important before and after a disaster

Preservation education opportunities increased significantly after the flood. Calls are received almost every week, and we have worked with both individuals and institutions to help them decide how to handle their flood-damaged materials. We hope that no one in eastern North Carolina will ever again have to suffer through a disaster like the flood that followed Hurricane Floyd. Our goal is to make people aware of measures they can take to protect materials during normal circumstances because many of those precautions will help them if they do have water damage.

There is no conclusion to this account because the aftermath of Hurricane Floyd's flood is still with us after many months. We expect to be working with flood-damaged materials and with people whose lives were impacted by the flood for several years.

Notes

[1] Munters Moisture Control Services 800-775-0935 <www.munters.com>.

[2] Activated charcoal cartridges for organic vapor/acid gas, 3 M model 6003.

[3] Reemay is a non-woven, spunbonded polyester fabric.

Guidelines to Prevent Water Damage

- Do not shelve materials under a vent where condensation or another form of water could leak on them
- Shelve books at least 12 inches from the floor.
- Do not store materials near a window.
- Remember the 70-50 Rule: 70°F and 50% RH is a comfortable environment for most materials.
- A closet is a good place to store materials, but mold can still grow if the temperature and humidity are too high.
- Keep air moving. Mold grows when air is stagnant and the temperature and humidity are high. Install a ceiling fan or place box fans in places where air should be moving. If using more than one box fan, position them so the air circulates in the same direction rather than blowing in opposite directions.
- Inspect storage areas regularly for water and other forms of damage.

Helpful Web Sites

After the flood, we found the following Web sites to be helpful for both institutions and individuals. The information at these sites can be used in disaster planning as well as after a disaster has occurred:

<http://www.fema.gov>
<http://palimpsest.stanford.edu>
<http://www.solinet.net>

Assemble supplies before a disaster

For several years, Joyner Library has had a well-stocked disaster supply closet and the Preservation and Conservation Department has had many supplies for small emergencies. (See Inset 2.) Since all of the supplies we needed were in the library, we did not have to spend valuable recovery time looking for materials.

Inset 2

Supplies Used in Flood Recovery

- ❑ Reemay #6, 7, 9, 10, 11
  rolls for large items
  cut into standard sizes: 10" x 14" & 11" x 17"
- ❑ Gloves
  clear like food handlers use for quick on/off wear
  heavy vinyl for long-term wear
- ❑ Lab coats/aprons
- ❑ Lysol: liquid and spray
- ❑ Handi-Wipes
- ❑ Small buckets: gallon ice cream containers
- ❑ Spatulas #6, 7, 9, 10, 11
- ❑ Large trays (purchased from bakery that closed)
- ❑ Clear acrylic plastic book plates with polished edges
  (standard sizes: 9"x12" & 11"x14")
- ❑ Heavy-duty rubber bands
- ❑ Information forms on white paper to attach to each piece
  & pencils
- ❑ Kraft paper to cover tables
- ❑ Folding tables to provide additional work and drying areas
- ❑ Extra books trucks from other parts of the library
- ❑ Activated charcoal cartridges for organic vapor/acid gas,
  3M model 6003 8
- ❑ Particulate (general industrial) respirators, 3M model 8210,
  NIOSH approval TC-84A-0007 8
- ❑ 2-gallon resealable plastic bags
- ❑ 18-gallon plastic storage boxes
- ❑ Scrap pamphlet binder board to use as light weights on paper
- ❑ Goggles from campus supply