

Ideal Responses to Water Damage? Lessons from New Orleans

Emily Ray
Yale University Library

On January 7th, 2006 the New Haven Fire Department called John Vicenti, Manager, Building Operations and Security for Sterling Memorial Library. A steam valve had burst in Trumbull College, the building adjacent to Sterling Memorial Library, and the heat from the steam valve triggered the sprinklers in a section of the library's stacks and sent large amount of steam into work and collection areas of the basement and first floor. Vicenti called the University Librarian, Alice Prochaska, and Roberta Pilette, Head of Preservation, both of whom came to the library. Not sure library staff would be allowed access, Pilette called her staff to plan. By 7:30 pm the Fire Department approved staff to enter the affected areas. As steam continued to be released in the room and out of fear that wet ceiling tiles would fall down on the materials in the room, staff removed books and some South East Asia materials to another area.

After talking to the University's risk managers, Pilette called Munters Corporation, a humidity control services vendor, which works with libraries and in other industries. Around 9pm, a Munters' representative arrived on Yale's campus. Munters' staff arrived shortly thereafter to pack and inventory materials prior to their shipping to Munters' facility in Chicago. Close to 4,000 items were frozen, decontaminated and vacuum freeze-dried. Several boxes of rare Cambodian newspapers were frozen and dried. Of the approximately 4,000 items, only approximately 50 items with clay-coated pages could not be treated. About 300 items had to be sent to the commercial binder for binding. The Cambodian newspapers emerged "looking great" with no problems, according to Pilette. Yale also hired Munters to clean and dry out the physical spaces affected by the steam leak.⁵

In my interview, Pilette stated that Yale had been lucky, as the Fire Department called the Building Manager and that the rest of the phone tree were available. All the

professionals in the Preservation Department were in New Haven (this steam valve burst 2 weeks before the ALA annual conference), and had experience with emergency response. A commercial company, Munters, arrived promptly and was able to begin treating the water-damaged materials- including the rare Cambodian newspapers.⁵

This response to a relatively small-scale water damage incident at Yale University Libraries could be considered ideal- or as close to ideal as a disaster can be. The original intention of this paper was to compare this “ideal” disaster to other disasters and assess whether other institutions: public libraries, private university libraries, archives, could repeat this ideal disaster treatment. If they could not, what were the factors that reduced the chance for the success of their disaster treatments: the amount of damaged materials, the difference between an in house problem or city wide disaster, the willingness to pay for cutting edge disaster recovery treatment from a vendor, the experience and knowledge of staff, the ability of the library to pay for treatment?

Within this query, this paper was to examine whether recovery treatments of water damage were equally feasible for large-scale disaster treatments, as well as small-scale damage. Effective disaster treatment exists for small-scale disasters. Is such care available for large-scale damage? Vacuum freeze drying can treat large amounts of frozen water damaged materials, but can libraries afford large amounts of treatments?

Following the Yale steam leak in January 2006, I spoke with librarians and archivists in New Orleans, sadly the site of much large-scale water damage to heritage collections. As my interviews progressed with staff from public libraries, archives and university libraries affected by Hurricane Katrina, it became clear to me that in New Orleans this difference of large vs. small scale was not the crucial issue in allowing collections to be treated with success. Large-scale treatment of water-damaged collections was possible, under some circumstances, as long as it could be paid for. Ideally, paid for by someone else. As victims of a natural disaster in the United States, some public institutions found that their treatment costs were eligible for FEMA funds. In some instances FEMA paid for complete restoration from vendors including freezing, vacuum freeze-drying and decontamination. Also, from these stories in New Orleans, staff experience with disaster treatments turned out to be crucial and the assistance of

colleagues also made a huge difference in the saving of collections. However, libraries' and archives' experiences dealing with FEMA were far from smooth or even consistent.

Conversations with librarians and archivists from differing institutions show that if the financing can be arranged, large-scale restorations of collections, even following a massive catastrophe are possible. Yet, the confusion that librarians and archivists encountered in New Orleans underscores the need for a clearer status for cultural heritage after a catastrophe. If materials can be physically treated and saved, we need to determine at what point cultural heritage collections are a priority and actions should be made to rescue and treat them. First comes saving lives, but when comes saving archival records and rare materials? What can be asked of library staff or emergency personnel to save documents? In New Orleans, the answers were not clear to these questions as librarians and archivists strove to save heritage collections from destruction. Following New Orleans can we begin to carve out a place for the standardized, necessary steps for saving cultural heritage after a disaster, not just among libraries, instead as a priority even in a city-wide catastrophe?

In New Orleans, after Hurricane Katrina there was chaos and confusion, but outside the city in Baton Rouge, Special Collections staff at Louisiana State University (LSU) Libraries began preparing to assist colleagues from institutions in the affected areas. Staff set aside space and gathered equipment to treat materials and prepared to offer advice to institutions and individuals unfamiliar with water damage treatments. Among the institutions who contacted LSU, the Louisiana State Museum's New Orleans facility (they have another facility in Baton Rouge), located in the Old Mint building on 400 Esplanade Ave in New Orleans, lost its roof in the hurricane and rain, not flood water, soaked its collection. Some albums, office records, and museum scrapbooks were brought to LSU. Most of the materials could be air dried by LSU special collections staff; and other materials, including the scrapbooks, were placed in LSU's freezers to await decisions by their proprietary institutions on how to treat them.³

According to LSU Special collections librarian, Elaine Smythe, libraries and archives struck by Hurricane Katrina called around or learned from mutual contacts from professional associations, such as the Society of Southwest Archivists (SSA) that LSU

was offering assistance. They understood that LSU could only provide basic treatments, such as air-drying. Yet, LSU could offer a safe space to store materials deemed at risk in New Orleans. The Catholic Archdiocese of New Orleans stored 700 volumes at LSU, including rare books such as the Complutense Polyglot Bible (1514-1517). Another 129 volumes and four linear feet of materials were kept by LSU in its library building for safe-keeping.⁶ Other materials received by the Catholic Diocese of Baton Rouge required washing and freezing in LSU's freezer. According to Elaine Smythe, it is unusual for LSU's Special Collections to own a freezer and it is perhaps the only university special collections in Louisiana to have one.³

In addition to assisting museums and archives struck by the hurricane, LSU received an unusual offer from New Orleans based photographer, Donn Young. He would donate his collection of work, if they would treat and try to save his work. Young contacted LSU on September 20th (Katrina made landfall in LA on August 29th) on October 2nd, Associate Dean Faye Philips, librarian Elaine Smythe, and Photography curator Mark Martin saw Young's collection and took it back to Baton Rouge for further examination and possible treatment. They spent four days triaging and from 100 cubic feet, 28 were deemed possible for rescuing. From the studio, most of the 35 mm color negative and color positive film was damaged beyond repair; however some film in mylar sleeves remained in better shape. Young also had a great deal of work stored on CD-roms, some were wiped out, but other CD's later proved recoverable. In my interview with Elaine Smythe, she stated that more of Young's collection has been treated than was originally thought in October.³

LSU found itself in an interesting position. Not being hurt by the natural disaster, yet close enough to help it was able to become an "archival ER."⁶ Word of mouth and professional contacts let affected institutions know that they could get basic treatments at LSU and a safe space to store materials not secure in New Orleans. Also, LSU had a freezer, which could accommodate materials, which needed more than air-drying. This assistance did not drastically interfere with the work of LSU's Special collection.

Smythe described the impact as relatively minor, with the greatest effect occurring on the few days when the materials arrived and scheduling for materials to be picked up. LSU received an NEH “We the people” grant towards its conservation work and used the money for replacing supplies used in the treatment of damaged materials and in paying the salary of a graduate assistant. LSU hired an assistant to work with the Photography curator on the Young collection, which LSU has now acquired.

LSU was able to help other affected institutions, without seriously impacting the work its staff does for its own collection, and a federal grant was able to refund the costs of materials used to help others. As admirable as LSU’s actions were, perhaps it was able to contribute so much due to the scale of the disaster. Hurricane Katrina struck on August 29th, archivists and librarians were not allowed into New Orleans until a week later. At that point, a great deal of material became unsalvageable, limiting what could be treated and making the work that LSU received manageable.³

While LSU found itself in the position of helping out damaged libraries and museums from New Orleans and other areas, the New Orleans Public Library (NOPL) found itself in a different position. The Main Building of the NOPL houses its archive in a sub-basement, two floors below ground level. When the extent of the hurricane’s destruction began to be known, staff feared that the building had been flooded. It turned out the Main Building did not flood. After the hurricane, an architect and engineer examined the building to determine why the building didn’t flood, when others in the neighborhood did. According to their assessment, some safeguards in the construction of the building-- the first floor was 3-4 feet above the flood line and the structure of the pipes stopped water from entering-- prevented the Main Building and its rare collection of archives in the sub-basement from being damaged.

Although staff was relieved and elated that this building did not flood, in the confusion after the storm, it took approximately three weeks for anyone to learn that a temporary off-site storage facility had lost its roof in the hurricane. The materials stored here included historical court records, civil court records, and New Orleans Police Department records and minor case files. The damage became known when a staff

member driving by the building (located in an area that did not flood) saw workers on the roof and realized the potential for loss.⁴

Of the records damaged by rain, the historical and civil court records had already been microfilmed and the NOPL had been negotiating not to be in possession of the police files and case records. Neither the Police Department nor the District Assistant's office asked the library to continue maintaining these records, yet they had not given an official request for the records to be destroyed. After the hurricane, Munters shredded 800 boxes of what was left of these records.⁴

Around the 20th of September staff learned of the risk to NOPL materials, it took another week to receive authorization to agree to a contract with Munters as the NOPL had to get multiple bids for the work. After that Munters' staff came and packed the boxes and transported them to Chicago where they were deodorized, dried, cleaned, vacuum freeze dried, re-boxed and shipped back to a facility outside of New Orleans, where they waited 6-7 months until FEMA paid Munters. Munters then brought the materials to New Orleans where they are being stored in the Main Building as there is both no funding for off-site storage and very few options available to anyone looking for appropriate storage facilities.⁴

Staff at Tulane University Libraries had a different experience from their colleagues at the NOPL. Dean of Special Collections Bill Meneray in an interview mentioned the library's previous experience with small localized emergencies and that in those incidents they had handled what they could and called in companies like Munters to assist, when it was necessary. In the case of Hurricane Katrina, the damage was so extensive (damage to the Tulane University campus- including the library has been estimated at \$300 million) that a university contract in existence prior to the storm with the damage restoration vendor Belfor came into affect and Belfor's staff came to the university.

Due to the extent of the flooding in Tulane University's part of the city and the chaos after the hurricane, it was two weeks before Belfor could get access to the library and bring in generators and HVAC equipment. Staff needed a pass to get into the city

until September 20th. On September 18th Belfor began removing materials, which took a while as the collection was in two buildings. One had eight feet of water, the other four feet of water.²

All the material was taken, packed, and shipped to Belfor's facility in Ft. Worth, TX. Print and manuscript materials were washed, thawed, re-frozen, freeze-dried, and treated with gamma rays. Most of the microfilm retrieved was to be treated, but the microfiche found after the storm could not be recovered.¹ Due to the expertise of the Tulane University Library staff with previous emergencies, they were able to discuss and decide with Belfor's staff on the treatment choices for their collections.²

As of mid-June 2006, the treatment had not been completed, as the University insurers wait to see how much of the treatment cost will be covered by FEMA, and how the value of property lost and property to be restored will be estimated. Tulane University Libraries also benefited from the university's risk management and emergency contract with Belfor, and with having staff with experience treating previous emergencies, even minor incidents. However, despite all these advantages, Tulane had the disadvantage of its location, the extent of the flooding and the fact that staff and Belfor's employees could not access the site until two weeks after the hurricane.²

Like Tulane University Libraries, the New Orleans Notarial Archives experienced significant water damage to its collections: 5,000 volumes of its 60,00 volumes of original land records were treated. These land records are contracts drawn up by Louisiana's civil law notaries and include transfers, property sales, and mortgages. In an interview with archivist Ann Wakefield of the Notarial Archives, she described their timeline of treatment. Prior to the hurricane, the Notarial Archives did not have a contract with Munters or other institutions, but had enrolled in Munters' non-binding Code Blue program. This status did not commit them to working with Munters, but did give the Notarial Archives priority if a disaster were to occur. Prior to the storm Wakefield had contact information for Munters and a file number established for the Notarial Archives¹

Wakefield evacuated with her family to Houston, Texas on August 28th. On the 29th, she contacted Munters to discuss options. Television coverage showed the flooding in the area near the Superdome- where the 20th century land records were located in a courtroom basement and where the 18th and 19th century records were in the research center on the 3rd floor of a commercial office building. Wakefield remained in contact with Munters via telephone from Houston and once she was back in contact with the Notarial Archives administration on September 4th, they continued the communication with Munters.

According to Wakefield, on September 6th, the Deputy Custodian and the Research Manager with Munters representatives went to the Notarial Archives and Munters began pumping out water from the courthouse basement. According to Wakefield's recollections it took two days to pump out the water from the building and the packing of the damaged files also took two days. All of the wet records went to Illinois for treatment, and other materials were placed in 18 semis that provided temporary climate control. At this point in the treatment, the owners of the research center's building required a "hold harmless agreement" and delayed further stabilization until this document was faxed to the owners in Texas. Munters' staff returned to the site on September 10th. In between there was no rain and broken windows on the 3rd floor fortuitously allowed fresh air, so the materials that had remained after September 6th were still stable.¹

For the financing of this treatment work, Wakefield reported that the Notarial Archives expenses were paid by the State of Louisiana, "who either have been or will be reimbursed 100% by FEMA...In any case our bills have been paid." She described the FEMA's representative advice as being to do everything to save the collection and worry about paying for it afterwards.¹ According to Wakefield, immediately after the hurricane, cost was not a factor in treatment decisions. As the treatment process continued, they worked to find less expensive measures. She mentions that prior to the hurricane none of the staff had experience with disaster treatments. Since Hurricane

Katrina, staff has participated in every disaster treatment workshop that they have been able to attend.¹

For the decisions on how to treat the damaged materials, Notarial Archives staff relied on Munters and its assessment of moisture levels to determine which volumes needed to be frozen. On other points, the Notarial Archives' staff was able to decline Munters' suggestions. They later chose to use a local vendor for triage of some less seriously damaged materials in order to save money. Also staff from LSU came to New Orleans and provided instruction on treating water and mold damaged materials.¹

At the time of my interview with Ms. Wakefield, all of the restoration work on the Notarial Archives' materials had been finished. Before the hurricane, they had planned a "massive digitization and indexing project" of the Notarial Archives materials. This project is now ongoing and has even more importance as many thousands of New Orleans residents are now living outside of the city and electronic access would be their only method of reaching these records.¹

Much was lost in New Orleans from Hurricane Katrina. The small successes described in the above narratives should not be considered outside of that context. The savvy of librarians and archivists in dealing with the difficult post-Katrina environment was impressive. In some instances, without prior contacts, from outside of the affected area, facing unnecessary red tape, and an unclear status with authorities or emergency personnel, librarians and archivists strove to care for their damaged collections. Ideally, these additional problems would not be present and for librarians and archivists the only issue would be working with their preservation colleagues or vendors to make the decisions for treating their collections.

In the relatively small-scale steam valve leak at Yale University Libraries in January 2006, preservation librarians were notified. As soon as the Fire Department deemed it safe, they were allowed to see the damage. A preservation care vendor came promptly and was able to get to work. This success does not have to be the sole property of an elite institution. Even in the chaos of New Orleans, the key factors of this successful treatment were possible and against the odds occurred, library staff gained

access to damaged materials and were able to have a vendor come and take the materials for treatment. Despite the immediate differences between a steam leak at a wealthy private university library and a natural disaster that devastated a region, under both sets of circumstances materials could and were saved. If the technology is capable of restoring damaged materials, even in the chaos following a catastrophe like Hurricane Katrina, then we must establish a place for heritage collections as a priority to be rescued in the immediate aftermath of a disaster. Only with that status can the key steps be taken that can save libraries' and archives' heritage collections for future generations. If we can achieve this status for heritage collections, it is our own past and culture that we will continue to lose.

References:

1. Interview with Ann Wakefield, Archivist, Notarial Archives Research Center
Conducted via email.
2. Interview with Bill Meneray, Dean of Special Collections, Tulane University
Libraries, June 13th, 2006
3. Interview with Elaine Smythe, Curator, Special Collections, Louisiana State
University Libraries May 30th, 2006
4. Interview with Irene Wainwright, Assistant Archivist Louisiana Division/City
Archives, New Orleans Public Library, June 9th 2006
5. Interview with Roberta Pilette, Head of Preservation, Sterling Memorial Library,
Yale University Library, April 25th, 2006.
6. What's New at Special Collections? Special Collections LSU Libraries. Available
online: <http://www.lib.lsu.edu/special/whatsnew.html> Accessed May 25th, 2006.