

Hurricanes Katrina and Rita

The Library and Archives undertook a number of efforts in response to the hurricanes that hit the Gulf Coast, including direct assistance to victims and evacuees and coordination of other organizations' efforts.

Within the agency, the Braille and Talking Book Library made its services available to people evacuated to Arizona. The Records Management Division participated in a job fair held at the Coliseum to ensure that evacuees had a chance to apply for open positions.

The Phoenix Public Library provided information for Phoenix evacuees, including local relief efforts and resources.

The Tucson-Pima Public Library (TPPL) staff provided information, maps, and fliers for Tucson evacuees. TPPL gave library cards to evacuees so that they could check out books.

Two staff members helped with national efforts to coordinate responses because of their work with professional organizations.

GladysAnn Wells was completing her term as President of the Chief Officers of State Library Agencies (COSLA). Under her direction, COSLA developed a spreadsheet of resources for libraries and archives relating to Hurricane Katrina.

Richard Pearce-Moses, Director of Digital Government Information, is serving as President of the Society of American Archivists. The Archivist of the United States asked him to serve on a disaster assessment team and to report on the storm's impact on records. His observations, the report of the team, and an article from the *Christian Science Monitor* follow.



Richard Pearce-Moses (left) and David Carmicheal inspect damage to records at the Jefferson Davis Presidential Library in Biloxi, Mississippi.



Vault is all that remains of bank in Bay St. Louis, Mississippi.



Libraries in Harrison County, Mississippi

Hurricane Katrina
Report from Mississippi
Richard Pearce-Moses

Three weeks after Hurricane Katrina hit the Gulf Coast, a small team was able to visit some of the archival repositories in the areas of Mississippi hit hardest by the storm. The team sought to show the profession's support for archivists and to ask the people on the front lines how the profession can respond in ways that will help given the current situation.

The team included David Carmicheal, President of the Council of State Archivists and State Archivist for Georgia; Richard Pearce-Moses, President of the Society of American Archivists and Director of Digital Government Information for the Arizona State Library and Archives; and Debra Hess Norris, Chair of Heritage Preservation and Chair of the Art Conservation Department at the University of Delaware. Other partners who helped organize the trip included the National Association of Government Archives and Records Administrators (NAGARA), the National Archives and Records Administration (NARA), the Council of State Library Administrators (COSLA), and the Society of Southwest Archivists (SSA).

On Sunday, September 18, Norris led an informal workshop on recovery of wet photographic materials. That evening, the staff of the Mississippi Department of Archives and History (MDAH), including Department Director Hank Holmes and State Archivist Julia Young, briefed the team on what they had seen on visits to hurricane-ravaged areas during the previous two weeks.

On Monday, September 19, MDAH staff members Grady Howell and Jeff Rogers led the team on site visits to several repositories in Waveland, Gulfport, and Biloxi.

The team observed that collections typically were either lost entirely or survived the storm but were damaged subsequently by high humidity and mold, with few collections in between. The Waveland City Hall and two buildings at Beauvois were demolished, leaving only a slab or a pile of rubble; records left in the building were destroyed. At other sites, records in buildings without power were damp from the high humidity, often exacerbated by water damage to the building. Many records at the Biloxi Public Library were submerged, and will need to be salvaged. Much of the damage to records came from a storm surge that swept through buildings, destroyed their contents, and then retreated. This suggests that conditions may be different in New Orleans, where the water resulted from a broken levee rather than a storm surge and where damage has probably resulted from standing water rather than surging water.

There was little evidence of paper in the debris surrounding homes and businesses. Shreds of fabric and plastic were caught in trees, but it appears that the power of the storm surge completely destroyed paper. A few plastic data disks and videotapes were scattered around, although caked in grime, and an occasional photograph was seen among the debris. In a few instances, a file cabinet could be seen standing (although often missing drawers), and in every case observed, the records were already heavy with mold.

Nothing can be done for the collections that were destroyed. The top priority to protect surviving records is to arrest the growth of mold. For those records that are merely damp, getting them into an air conditioned environment is a high priority. Power is still off in many areas, however, and even where it is available there is the concern that it is not always safe to restore power to damaged buildings. It is critical that these records be removed from damaged buildings to ensure that they are not destroyed during efforts to clean up the buildings. The smaller number of records that were soaked must be (and are being) transferred to freezer trucks when possible, but often access to those collections is complicated by hazardous conditions in the building.

At the same time that individuals are working to care for their collections, they are also struggling to recover their own lives. One individual with whom we spoke has lost his home, and another had six feet of water on the first floor. Both, though, were hard at work sorting through damaged records. Their commitment to their work is admirable.

Although a few repositories could potentially use volunteers to help with recovery, the reality is that currently there is no way to accommodate volunteers. In the affected areas, there is no lodging, no potable water, no food. Lodging in Jackson, about 150 miles from the coast, is scarce; MDAH staff members have been commuting three hours each way on a nearly daily basis.

Stabilizing the records can buy time. If damp records can be dehumidified to halt mold growth and if wet records can be frozen, people can then take some time to do more careful planning, to find out what FEMA will pay for, and to identify other funding sources. At some time in the future, it will be possible for volunteers to be accommodated.

The team repeatedly asked, "What do you need?" Here's what we heard:

1. An air-conditioned space to which damp and wet records can be moved.
2. Someone to help manage logistics for the transfer and control of records stored in this facility and, in the future, to coordinate volunteers.
3. Space for accommodating volunteers.
4. A telephone hotline, staffed by experts, that members of the public might call for advice on recovering their personal papers, photographs, and other records.

MDAH staff members currently are spearheading recovery work, but it is placing enormous demands on their staff and budget. Staff members of the National Archives and Records Administration—and Allen Weinstein personally—are helping to remove bureaucratic barriers. NARA already has released some funds to Mississippi and Louisiana to help with immediate expenses, and it is looking for additional funds to support these efforts.

It may be a month – and perhaps more – before repositories will be ready for volunteer help in salvaging documents. In the interim, the professional organizations must work together to help find solutions to the immediate problems described above.

The team is putting together a document of "lessons learned." But one lesson stands out among all others: Even modest efforts at disaster preparedness and prevention often made the difference between destruction and survival of essential records. That's a lesson everyone can and should take to heart.

21 September 2005

Report of Hurricane Katrina Damage Assessment

by

Debra Hess Norris (Heritage Preservation)

Richard Pearce-Moses (Society of American Archivists)

David Carmicheal (Council of State Archivists)

Background

On September 19, 2005, representatives of the Council of State Archivists (CoSA), the Society of American Archivists (SAA), Heritage Preservation, toured the Gulf Coast area of Mississippi to assess the impact of Hurricane Katrina on record-keeping facilities in the region. The group sought to demonstrate the profession's solidarity with those affected by the storm and to learn how best the archival profession could help them

Staff of the Mississippi Department of Archives and History (MDAH), including Department Director Hank Holmes and State Archivist Julia Young, helped with logistics. MDAH staff members Grady Howell and Jeff Rogers served as guides for the team. The team is deeply grateful for their assistance.

The group traveled from Waveland in the west to Biloxi in the east and viewed two city halls, a county courthouse, a local historical society, a historic site, and a public library. The repositories were representative of facilities in the region that house public and private records, vital records, and historical collections. The tour also gave the group a chance to see the impact of Katrina on businesses, private homes, churches, a college, schools, and other private and public facilities.

This report is specific to conditions observed along the Mississippi Gulf Coast, which suffered significant damage from a storm surge. Conditions may be significantly different in New Orleans, where water from a broken levee rose more slowly and records will doubtless remain immersed for longer periods of time.

Preparations for the storm

Although many record keepers were proactive in their attempts to protect records, almost no one foresaw the scale of Katrina's devastation, and most attempts fell far short of the necessary measures. However, even modest efforts for disaster preparation helped records survive.

Record keepers consistently reported that in preparing for Katrina they referred to Hurricane Camille (1969) as the 'benchmark.' At one site, for instance, artifacts and records were housed in a building that had withstood Camille, and staff moved items from lower shelves onto tables, assuming a worst-case scenario of two or three feet

of water finding its way into the facility. In fact, the facility was totally destroyed and its contents swept away in the 30- to 35-foot storm surge that accompanied Katrina.

The storm surge was responsible for much of the damage and loss, particularly close to the Gulf. In many instances records were moved from first-floor locations to second- or third-floor locations in anticipation of the storm. Often this resulted in the records being saved because, in some instances, the buildings were constructed in a manner that allowed the first floor to wash away without significant damage to higher floors. In some cases, though, roofs were blown away by the force of the wind and records on higher floors suffered severe water damage from rain.

The team was unable to assess the extent to which record keepers had prepared for catastrophic loss by microfilming or securing copies of records, but such information is likely to be available at a future time. Cities and counties might be expected to have such procedures in place. In one case, city council minutes were moved to a bank vault just before the storm hit; the city hall and bank building were demolished, but the bank vault survived and the records were recovered.

Response to the storm

Response to Katrina is less dependent on traditional disaster plans than on improvised actions as conditions permit.

Record keepers along the Gulf Coast are making heroic attempts to rescue damaged records. At many sites the team found staff hard at work laying records out to dry or boxing them for eventual shipment to freezers. In nearly every case, the staff said that their own homes were either severely damaged or completely destroyed. The team found that the emotional toll of the storm was severe and the personal loss often catastrophic. Workers expressed the sense that recovering records gave them something to focus on and a feeling of accomplishment in light of the overwhelming difficulties they faced.

Institutions, both large and small, were improvising their response because major resources are being concentrated—appropriately—on health and safety concerns. Large populations are in need of basic housing, food, water, clothing, and medical attention, and it may be many months before the loss of property and identity records begins to be felt.

The team observed that collections typically were either destroyed entirely or survived the storm but were damaged subsequently by high humidity and mold. Recovery of damp or damaged collections was often exacerbated by unhealthy residue in the buildings.

There was little evidence of paper in the debris surrounding homes and businesses. Shreds of fabric and plastic were caught in trees, but it appears that the power of the

storm surge completely destroyed paper. A few plastic data disks and videotapes were scattered around, although caked in grime, and an occasional photograph was seen among the debris. In a few instances, a file cabinet could be seen standing (although often missing drawers), and in every case observed the records were already heavy with mold.

Devastation in the area was so total that traditional response plans were not equal to the event. Such plans usually envision removal of wet records from affected areas within 48 hours, for instance. Access to buildings and areas damaged by Hurricane Katrina, though, is controlled by law enforcement or military personnel, and hazardous conditions largely prevented any response during the 48-hour window. In many cases record keepers are still being prevented from accessing their collections more than four weeks after the storm.

Traditional disaster plans also assume that staff who are familiar with the records—and, perhaps, skilled in the care of records—will be available to respond to the disaster. In the aftermath of Katrina, however, staff of many repositories have been displaced or are preoccupied with their own overwhelming physical needs. In the absence of the record keepers themselves, response is sometimes left to others who have little experience with records. At a county courthouse the team spoke to members of the National Guard who had been sent to begin ‘rescuing’ the land records damaged by water. Their confused commander said that, during the course of that day, he had been instructed in how to save the records by three different people who had described three different techniques (ranging from fanning the pages open to cutting the bindings off). Two of the ‘instructors’ turned out to be vendors from paper restoration companies. As a result, the Guard members had stopped work and were waiting for further instructions.

Finally, the team quickly scanned a packet of widely used disaster recovery publications (which were being distributed in the regions struck by Katrina) and found that much of the information was irrelevant in the face of Katrina’s scale. Repositories given such publications were unlikely to find them useful.

Action Required: Immediate

The team identified several action items that were immediately initiated to respond to the situation in Mississippi.

1. Contact US Archivist to solicit FEMA help for the Biloxi Public Library and to provide support to cover increasing immediate and essential response costs.

(Completed)

2. Contact NHPRC for assistance in funding temporary warehouse site for recovery operations. **(Completed)**

3. Identify warehouse site within easy reach of coastal Mississippi where records may be taken and stored during recovery operations. Ensure proper health and safety precautions due to mold growth. (**In progress.** SAA and CoSA working with MDAH.)
4. Identify individual who could relocate to Mississippi and be employed for 6-month period to act as Volunteer and Resources Coordinator to assign resources to repositories and share information with the profession at large. (**In progress.** Input needed from profession at large. Initial funding offered by CoSA. Further funding sources may be needed.)
5. Deploy volunteer conservators and archivists to Jackson for one-week periods to assist with recovery work and training. Determine if funding is available from FEMA or elsewhere. (**In progress.** AIC and SAA. Deployment of volunteers must wait until Volunteer and Resources Coordinator is in place.)
6. Contact AIC to advise where conservators may be most helpful in Gulf Coast Mississippi and to ensure that their visit is carefully coordinated with the state. (**Completed**)
7. Develop press release aimed at increasing media awareness about the cultural records at risk and urgent need to ensure their long-term preservation (**In progress.** SAA lead)
8. Contact all local press and distribute information on salvaging personal belongings as families are returning to their homes and trying to save anything possible. (**In progress.** Heritage Preservation and AIC with MDAH.)
9. Organize no-cost recovery effort for artifacts damaged at Beauvoir through the University of Delaware and other graduate programs. Secure shipping support via ANAGPIC. (**In progress.** AIC and the University of Delaware.)
10. Establish a toll-free number for preservation assistance, especially for members of the public. (**In progress.** AIC and Heritage Preservation; Heritage Preservation lead. Temporary number: contact AIC at 202-452-9545 or Beverly Perkins at 951-698-1520.)

Action Required: Short Term

The team identified several action items that might be undertaken by the archival profession in the short term to enhance response to future disasters of this magnitude.

1. Institute a once-a-year, emergency preparation day (possibly called May Day) on which the entire profession would focus attention on a few simple but critical aspects of emergency planning. Specifically,
 - a) Essential information required in the event of an emergency (large or small) would be updated, verified, and disseminated on that day by every record repository in the country.
 - b) Conduct a disaster drill to ensure that everyone knows how to respond.
 - c) Make sure that there are sufficient supplies on hand for an emergency response. (SAA lead)
2. Request that Congress allocate block grants to the states to assist with emergency planning and training in the preservation of archival records during the next 12 to 24 months. (CoSA lead)
3. Amend FEMA legislation to include vital and historical records among their legislated responsibilities. (CoSA lead)
4. Develop a placard to be used by state archives and other assessment authorities during initial assessment of damaged sites. The placard—which could be nailed to the wall of the repository—would announce that an assessment team had visited the site, detail any recovery recommendations, and provide contact information (for the State Archives, for instance). This information could be referenced by those later sent to the site to assist in the recovery. This may avoid mass confusion and contradictory recommendations. (CoSA lead)
5. Create and update a directory and/or database of vendors and maintain online for use by the profession. (SAA lead)
6. Review widely used disaster publications to ensure that their information is relevant and not boilerplate. (AIC lead)

Action Required: Long Term

The team identified several action items that might be undertaken by the archival profession in the long term to enhance response to future disasters of this magnitude.

1. Archives must recognize—and place greater emphasis on—duplication and off-site storage as the *only* preservation tool adequate to a catastrophic disaster. Systematic imaging programs should be developed and implemented to protect essential records. States with coastal areas or those threatened by natural disasters may focus on these areas first.

2. State archives, local governments, and private record repositories could institute 'buddy systems' with comparable repositories in other states far removed (geographically) from their own. 'Buddy' repositories might store copies of vital records for each other or provide a single point of contact for staff displaced by major disasters.
3. The profession must make practical, current disaster preparedness a high priority. Surveys consistently show that most disaster plans are out of date or that information that is essential for response is out of date. Disaster plans that list home phone numbers are useless when homes have been destroyed. (Personal cell phones and e-mail addresses may be more appropriate in such cases.) Plans must include priorities for salvage, and such priorities must be determined in advance. The inability to recognize which records are essential creates confusion and time may be wasted on salvaging materials that are replaceable or that do not merit the cost.
4. State archival agencies need to ensure that their states have been surveyed and their historical records repositories identified. It is essential that state agencies know *where* records—public and private—are held *before* a disaster strikes. Wherever possible, historical repositories should be plotted on maps (or within a Geographic Information System) and contact information of key personnel should be kept current. More detailed systems might include a general description of the records held by each repository and whether these records relate to individual identity, rights, or entitlements.
5. The profession should develop a simple brochure and website for the public that identify and describe essential records that must be retained and guidelines for their long-term preservation.
6. NARA should develop a mobile response and recovery laboratory, which could be dispatched immediately to the site of a disaster to give NARA a highly visible presence and allow them to work with local and state agencies to ensure a rapid response to records issues. When not involved in immediate disaster recovery, such a vehicle might travel widely to provide training and raise awareness to archivists and the general public.
7. NARA should develop rapid response contracts with private companies to provide freezer trucks to disaster sites within days of the event.

from the September 28, 2005 edition - <http://www.csmonitor.com/2005/0928/p12s01-lihc.html>

Saving history from a hurricane

Teams of archivists are rushing to the Gulf Coast on an urgent mission to recover priceless records damaged by Katrina.

By Marilyn Gardner | Staff writer of The Christian Science Monitor

When two feet of water flooded the basement of the New Orleans courthouse a month ago, archivist Stephen Bruno faced a huge problem. All the books on the bottom shelves were wet. He knew the soggy volumes, containing important public records, must be put in freezers to halt the growth of mold until they could be dried out.

"I made a public plea for help," says Mr. Bruno, custodian of notarial records for Orleans Parish. "Once they finished saving people, I became deeply concerned that we had to save records."

Books, documents, and photographs in public and private collections remain an invisible part of rescue operations in the aftermath of hurricane Katrina. From courthouses, libraries, and businesses to lawyers' offices and homes, the need is the same: to dry out papers and save as many documents as possible.

Salvage efforts have been hurt by poor access to storm-ravaged areas and by a lack of electricity.

"Without power, there's no way to control relative humidity," says Sharon Bennett, a conservator from Charleston, S.C., who spent last week in New Orleans assessing the damage to cultural collections. "There's a very short amount of time before the damage becomes irreversible. You can't get the stains out."

At the New Orleans courthouse, crews spent a day and a half pumping out thousands of gallons of water. Snakes slithered across the muddy floor. After removing 60,000 books, they stored dry volumes in trucks in the parking lot. They loaded wet books into two freezer trucks, to be transported to a restoration firm near Chicago.

"Most documents were land deed records, very old," says Lauren Reid, an executive vice president at Munters Moisture Control Service, a restoration firm in Glendale Heights, Ill. "Louisiana is a Napoleonic state. There's a lot of

historic records in that state."

Truckloads of papers from other damaged collections are on the way, Mr. Reid says. Twenty more trucks of wet documents are still being stabilized in New Orleans before being shipped.

Reid describes the restoration process. "When paper gets wet, paper fibers start to swell, and they twist," he says. "That's called cockling." Inks may run, and mold may grow. Freezing prevents further degradation of the paper.

Large loads of documents, 500 to 600 cubic feet at a time, are placed in a vacuum chamber. The chamber is sealed, the air is pumped out, and a small heat source is turned on. The chamber never gets warmer than 32 degrees F., but the vacuum causes the ice to sublime - to turn directly from a solid to a gas, without going through a liquid phase. In the process, dirt is lifted to the paper surface, where it can be carefully brushed or vacuumed away. As a final step, the pages are sanitized using gamma radiation.

Drying and cleaning takes between 10 days and two weeks, Reid says. Costs vary so widely he declined to give a figure.

Even after all this treatment, Reid says, it is difficult to get documents back to their previous condition.

Wet photos present other challenges. "With photographs, you can get all kinds of distortion," says Paul Messier, a conservator of photographs and works on paper in Boston. "Things get buckled. You end up with an unruly group of objects, no longer two-dimensional. Any sort of fungal growth can cause very dramatic staining to occur on books, photographs, works on paper. The fungus itself can completely undermine large sections of a photographic image."

In New Orleans, the main public library stayed dry. But six of the 12 branch libraries were "pretty much devastated by flooding or rain damage," says Wayne Everard, archivist for the library. Although water flooded the basements of two libraries at Tulane University, he says, "They think they'll get a lot of important stuff recovered."

Already the American Association for State and Local History has raised funds to send RVs to affected areas. On those RVs are conservators from the American Institute for Conservation of Historic & Artistic Works in Washington, D.C.

Last week the first team of these volunteers arrived in New Orleans. Dressed in hard hats, hip boots, masks, and Tyvek suits, they visited libraries, historical societies, and other cultural agencies.

"We're doing assessments," says Conover Hunt, a collection specialist in Hampton, Va. "That's the first thing to do in deciding how to fix what got hurt."

In another volunteer effort last week, Richard Pearce-Moses, president of the Society of American Archivists, was part of a team of archivists visiting three sites in Mississippi - Gulfport, Biloxi, and Waveland. They surveyed damage

in city halls, a public library, a historical society, and other archival collections.

"Records collections were either completely destroyed by the storm surge or were in poor condition because of high humidity that causes mold growth," Mr. Pearce-Moses says. The challenge now is finding space to move records from damp buildings to dry locations.

At the Biloxi Public Library, the building is structurally sound, but the interior is filled with mud and mold. Locked inside is a collection of valuable historical photographs. "If we don't get in there and have them frozen and then restored, we may lose the most significant collection of Biloxi history," says Pearce-Moses.

The Society of American Archivists has a list of 200 archivists willing to donate time to help. But a lack of lodging, water, and food in affected areas prevents large numbers of volunteers from traveling to the area. Staff members from the Mississippi Department of Archives and History are commuting three hours a day each way to try to salvage collections.

Public records are not the only documents needing help. "As people begin to get back into their homes, they'll be looking at their family Bible, family photographs, and wondering how they can salvage them," Pearce-Moses says. "We need some sort of hotline for the public."

In another sign of the collective effort involved, the National Archives is working to find freezer space to store books and documents until they can be treated, Ms. Bennett says.

They are racing the clock. "The huge fear is that it may be too late," says Mr. Messier. "We almost couldn't have a worse combination of elements - the initial wetting of the material, then prolonged exposure to high-level humidity. We're looking to do our absolute best with what we are presented with."

At the New Orleans courthouse, Bruno still does not know where the displaced records will go permanently. But of one thing he is certain: "They'll never be stored below ground again."

As archivists scramble to save important collections, they hope for greater public recognition and support.

"People have simply forgotten about the archival collections, where most of their history resides," says Faye Phillips, associate dean of libraries for special collections at Louisiana State University. "We really need to get that on the radar for future disaster plans. You can buy new library books if you can come up with the money, but you can't buy new archives."

[Full HTML version of this story which may include photos, graphics, and related links](#)

