Salvaging Water-Damaged Family Valuables and Heirlooms

The losses that are the result of disasters are usually measured in dollars, but often the losses that matter the most are the cherished items and heirlooms that are closest to the hearts of individuals and families. Although these treasured items may be damaged in floods, hurricanes, or tornadoes, it is often possible to salvage them. With a little patience, prompt action, and professional tips, saving treasured photographs, letters, and other irreplaceable objects is possible, although it may involve a follow-up consultation with a conservator.

General Information
- If the object is still wet, gently rinse it with clear, clean water. If it is dry, clean off silt and debris with a soft brush or dab it lightly with a damp cloth.
- Air dry wet or damp objects indoors, if possible. Sunlight and heat may be too intense, causing splits, warping, and buckling. Increase airflow with fans, open windows, or air conditioners, but do not point fans directly at drying objects. Inhibit the growth of mold and mildew by reducing humidity with dehumidifiers.
- Personal safety is important when working with objects retrieved from contaminated water. Wear disposable vinyl or nitrile gloves, protective clothing, goggles, and, when possible, use a respirator while working.

Photographs
Carefully remove wet photographs from plastic/paper enclosures; it may be safer to slit and peel an enclosure away from the photo than pull out the photo itself. Save or copy written names, etc. Wet photographs and negatives that are stuck together should never be pulled apart. Soak them in clean water until they separate, up to 48 hours until you can air dry or freeze them. (Do not freeze glass negatives or plates.) Rinse them in fresh water. Do not touch or blot surfaces. Air dry the photographs by hanging them with clips placed at the edges, or lay them flat, face up, on absorbent paper. Keep photographs from contacting adjacent surfaces or each other. If behind glass, see Framed Art.

Books and Documents
If rinsing is necessary, hold books closed. If leather, cloth, or paper materials are tacky or sticky, place wax paper between them. Pack books, spine side down, in a single layer in sturdy containers. Stack documents so as not to crush them. Place the containers in a freezer, preferably with a frost-free setting and set it to the lowest possible temperature. Expect this drying process to take from

Covered in mud and silt, family photos and other family heirlooms lay on streets and lawns after the severe flash flooding in Des Plaines, Illinois, in April 2013. Photo by Bryan Adams/FEMA Corps.

Framed Art
Paintings: Remove from the frame whether wet or dry, unless stuck to glass. Keep it on the stretcher bars. If still wet, rinse mud and dirt off with a clean sponge and distilled water. If the paint layer is cracking, flaking, or otherwise appears unstable, do not attempt to clean; consult a professional conservator. If stable, gently blot the back of the canvas with a clean, dry towel; avoid distorting the canvas with pressure. Air dry using good circulation instead of heat or sunlight. To increase circulation, lay the canvas face up on a horizontal surface with airspace beneath the stretchers. Art/photos/documents behind glass: Remove from frame unless object appears stuck to glass. Air dry slowly, image side up with nothing touching the surface. If object is stuck to glass, leave it in the frame and air dry glass-side down for future scanning or treatment.

Books and Documents
If rinsing is necessary, hold books closed. If leather, cloth, or paper materials are tacky or sticky, place wax paper between them. Pack books, spine side down, in a single layer in sturdy containers. Stack documents so as not to crush them. Place the containers in a freezer, preferably with a frost-free setting and set it to the lowest possible temperature. Expect this drying process to take from
several weeks to several months, depending on the freezer temperature and the extent of water damage.

**Basketry**
Gently rinse, drain, and blot baskets to remove excess water; do not wring or twist to dry. Stuff the baskets with clean paper towels or cotton sheets to retain shape and absorb stains. Cover with clean towels and air dry them slowly, changing the blotting material regularly.

**Fabrics and Textiles**
Textiles will be weaker and heavier when wet and will need extra physical support when moving. Do not attempt to unfold extremely delicate fabrics if the fragile layers are stuck together. Do not stack wet textiles. To remove mud and debris, re-wet the textiles with gently flowing clean water or with a fine hose spray. Gently press water out with the palm of your hand. Do not wring or twist dry. Remove excess water with dry towels, blotting paper, or un-inked paper, especially if the dyes are bleeding. Re-shape the textile while it is damp to approximate its original contours. Do not place textiles in sealed plastic bags.

**Wooden Furniture**
Gently rinse/sponge wooden surfaces to clean, and then blot and air dry slowly. If the furniture has a painted surface, air dry slowly without removing dirt or moisture. A slow process will help ensure that the wood dries evenly and is less likely to warp, split, or crack. Improper drying may cause the furniture to shrink or the inlay to lift. Never put wood furniture out in the sun to dry; the heat will cause uneven drying and can lighten and fade some wood stains. If in doubt, consult a furniture conservator for the best method to dry your water-damaged furniture.

**Broken Pottery and Ceramics**
If objects are broken or begin to fall apart, place all broken pieces and detached parts in clearly labeled open containers; ideally, a separate container should be used for fragments of each broken object. Do not attempt to repair objects until they are completely dry or, in the case of important materials, until you have consulted with a professional conservator. Monitor them for mold.

**Metal Objects**
Rinse metal objects exposed to floodwaters, mud, or silt with clear water and blot dry immediately with a clean, soft cloth. Metal objects can be directly dried with fans and low-heat hairdryers to increase their drying rate.

Allow heavy mud deposits on large metal objects, such as sculptures, to dry. Caked mud can be removed later.

**Leather and Rawhide**
If necessary, rinse/sponge with clear water to remove mud and reduce stains. Blot them dry with soft cloths or towels. Pad them with dry towels or un-inked paper to maintain shape; air dry. To keep rawhide, semi-tanned leather, such as kidskin, and fur supple, gently and frequently manipulate them during drying.

Because the information provided is general, the Heritage Emergency National Task Force strongly recommends that professional conservators be consulted regarding the appropriate method of treatment for historic objects. More detailed information is available from the following resources.

**Resources**

- Video: Water Segment from *Field Guide to Emergency Response*
youtube.com/watch?v=rXyA5Dq_jHM
- Video: Mud Segment from *Field Guide to Emergency Response*
youtube.com/watch?v=9KSkxydvnY
- Video: Mold-Damaged Artwork
  youtube.com/watch?v=2zKnWudaYyQ
- Salvage Procedures for Wet Items
  mnhs.org/preserve/conservation/emergency.php
- Find a Conservator
  conservation-us.org/membership/find-a-conservator
- Regional Alliance for Preservation (RAP)
preservecollections.org
- Heritage Emergency National Task Force
  culturalrescue.si.edu/resources/response-recovery-resources

For more information, visit the HENTF website or email HENTF@si.edu. This fact sheet was prepared with the assistance of PRICE, the Smithsonian Institution’s Preparedness and Response in Collections Emergencies support team.

FEMA and the Smithsonian Institution co-sponsor the Heritage Emergency National Task Force, a partnership of 58 national service organizations and federal agencies created to protect cultural heritage from the damaging effects of natural disasters and other emergencies.