



Disaster readiness · response · recovery

Flood-Damaged Wood Furniture

Assessing the damage

Floodwater can damage wood furniture in several ways. Direct contact can cause changes in structure and appearance. Joints may loosen and the wood itself may warp and/or crack. The finish will get cloudy and staining can occur. The damage to wood can progress from slight to severe in only a few days.

Before trying to salvage damaged wood furniture, decide which pieces are worth restoring. Such decisions should be based on:

- Extent of damage
- Cost of the article
- Sentimental value
- Cost of restoration

Antiques may be worth the time, effort, and expense of restoration. Generally, except for drying and cleaning, the less that is done to an antique, the better, since even minor changes can reduce its value.

Try to preserve the original finish of antiques. Restoration is preferable to refinishing. Antiques should dry out slowly to reduce uneven shrink-

age, which can cause cracking, warping, and splitting. Unless you are an experienced furniture restorer, it is best to leave restoration to a professional who can preserve the value of the piece. Improper drying, restoration, and repair procedure can cause more damage.

Solid wood furniture can usually be restored unless the piece was in the water for several days to a week, and the damage is severe. Clean and dry it, then assess whether or not it can be repaired. Saturated wood expands and then shrinks as it dries. This may loosen joints and cause warping and swelling. Solid panels and tops are particularly vulnerable, especially when the inside is not finished. Slightly warped boards may be removed and straightened or replaced.

Woodworking tools, clamps, and other equipment and materials may be needed. Decide if you have the time, equipment, and ability to do the work.

Veneered furniture may not be worth the cost and effort of repair unless it is very valuable to you. Veneered furniture usually has a core material that is plywood, particleboard, or

SOME FORMS OF DIRECT WATER DAMAGE

Material	Slight	Moderate	Severe
Wood framing	Water stains	Mold and mildew	Wood decay
Solid wood furniture	Cloudy finish, minor water stains	Flaking or missing finish, open joints	Cracks, warping, separation
Pressed board core furniture, with veneered or vinyl wrap surface	<i>In water 1 hour or less:</i> Cosmetic damage: dirty, cloudy finish	<i>In water for several hours:</i> Minor swelling, mold, mildew	Permanent swelling, vinyl wrap separation

Source: Adapted from NIDR Guidelines for Fire and Smoke Damage Repair, 1997

medium density fiberboard. Particleboard and fiber cores swell when they come in contact with water. Thus, veneered seams come apart. Printed vinyl surfaces and low-pressure laminates will come unglued and cannot be repaired, even by a professional. If veneer is loose in only a few places, you may be able to repair it, but veneered furniture repairs are usually best done by a professional.

If insurance allows part value on flood-damaged furniture, it may be best to apply the money to new furniture, rather than paying for extensive repair.

Salvaging the furniture

If wooden furniture is salvageable, slow drying and proper repair are essential. Rubber gloves should be used with cleaning solutions or when working with flood-damaged or moldy furniture.

Submerged Furniture:

- Take furniture outside and remove back panels, drawers, and doors, if possible. Drawers and doors will probably stick due to expanding wet wood. Do not try to force them out from the front.
- Use a hose to clean off mud and dirt inside and out.
- Take the furniture to a well-ventilated storage area. Do not let it dry in the sun, or it will warp and twist out of shape.
- Check the furniture periodically. Remove drawers and open doors as soon as you can without forcing them. Continue to leave the back panel off to allow air to circulate throughout the piece. It may take several weeks or months before the furniture is completely dry and ready to repair and refinish.
- Mildew will continue to grow as long as the wood has a moisture content above 20 per-

cent. Use mineral spirits on mildewed surfaces. Be sure to check underneath and inside.

- Solid wood furniture with a cloudy finish, flaking or missing finish, open joints, and even cracks and warped boards can be salvaged. The joints can be reglued and warped boards can be straightened. Consult an experienced cabinetmaker. Special tools and skills will be needed. If you do not have the skills or the tools, get an estimate. Compare that with the cost of buying new furniture of compared quality.
- Veneered furniture submerged in water for several days will be more difficult to salvage. If the particleboard underneath has swollen, the damage will be permanent.
- If the veneer is loose in just a few places, it may be glued back by a cabinetmaker or skilled woodworker.

Damp Furniture

- White spots or a cloudy film may develop on damp furniture that has not been submerged. To remove the white spots:
 - If the entire surface is affected, rub with a damp cloth dipped in turpentine or in a solution of 1/2-cup household ammonia and 1/2-cup water. Wipe dry at once, and if the color is restored, polish with wax or furniture polish.
 - If color is not restored, dip 000 steel wool in oil (boiled linseed, olive, mineral, or lemon). Rub lightly with the wood grain. Wipe with a soft cloth and re-wax if the color is restored.
 - For deep spots, use a drop or two of ammonia on a damp cloth. Rub at once with a dry cloth. Rubbing cigarette ashes, powdered pumice, or a piece of walnut meat into spots may help remove them.
 - If spots remain after all efforts to remove them, the piece should be stripped of the old finish and refinished.



Adapted by Dr. Wilma S. Hammett, Extension Home Furnishing Specialist, North Carolina Cooperative Extension Service, from: *NIDR Guidelines for Fire and Smoke Damage Repair*, 1997; University of Florida, Institute of Food and Agricultural Sciences, *Disaster Handbook*; and *Repairing Your Flooded Home*, Federal Emergency Management Agency.