



Saving Your Flood Damaged Older and Historic Buildings: A Guide for Property Owners in North Dakota

Many older and historic buildings in North Dakota have been affected by the recent flooding. This overview is designed as an initial guide in helping property owners minimize structural and cosmetic flood damage. Detailed information is available online at the Preservation North Dakota, State Historical Society of North Dakota, and National Trust for Historic Preservation websites.

Preservation North Dakota • www.prairieplaces.org
email: info@prairieplaces.org • tel: (701) 356-3001

State Historical Society of North Dakota • <http://history.nd.gov/>
email: histsoc@nd.gov • tel: (701) 328-2666

National Trust for Historic Preservation • www.preservationnation.org
email: mpro@nthp.org • tel: (303) 623-1504

Observe Safety Precautions

- Follow all emergency rules, laws, and regulations.
- Do not walk or drive through a flooded area.
- Stay away from power lines and electrical wires.
- Turn off gas, electric, and other utilities until conditions are stable and safe.
- Look before you step - mud can make walking surfaces slippery.
- Be alert for gas leaks.
- Wear protective clothing. Floodwaters and remaining silt are contaminated by sewage and chemicals. Use disinfectants to wash your hands before eating.
- Carbon monoxide exhaust kills. Make sure generators or grills are properly vented.

After the Water Recedes – A Checklist

- ***Document building damage before clean-up*** - Notes, photos and videos can be critical with insurance adjusters.
- ***Stabilize any unstable structures with temporary bracing*** - Engage professional engineer or architect in bracing solutions if at all possible.
- ***Keep building properly ventilated*** - Open windows and doors and allow the moisture to escape. Fans can be used to speed evaporation by moving interior air and exhausting humid air to the outdoors. Once ventilation has ceased to have impact, experts recommend closing up the building and using dehumidifiers or air conditioners to complete drying.
- ***It is recommended to remove all wet carpet, sheetrock, and insulation*** - Be careful not to damage pipes and wires buried in the walls in removing the insulation.

- **Clean everything that got wet with a disinfectant** - Dirt and flood debris from all surfaces should be rinsed with fresh water as soon as possible. It is safer and easier to remove the mud while it is wet. Check heating and air conditioning ducts and clean out any mud or dirt. With electric current OFF, remove covers to electrical outlets and mechanical chases and rinse these areas thoroughly. Check for damage. Let areas dry before closing.
- **Change HVAC filters frequently**
- **Check for foundation damage** - Work with experienced architects or engineers.
- **Save historic materials if possible** - Salvage samples of unusable historical materials for future reproduction.
- **Use caution when removing lead-based paint or any products containing asbestos**
- **Clean and repair roof and drainage systems to protect building from future damage**

Wood Rot

Fortunately for flooded buildings, fungi must exist over a relatively long period of time for wood rot to be destructive. Damage from a one-time event, such as a flood, is usually negligible if the wood is allowed to air dry. Problems occur when saturated wood is encapsulated so that the water cannot evaporate.

Plaster and Wood Trim

With plaster, check for obvious areas where plaster must be removed, such as ceilings with large sags. Falling plaster, especially wet plaster, can be dangerous – do not stand directly below. Except for areas of obvious damage, the best way to determine whether plaster must be replaced is to let it dry and then inspect it. Damage to wood floors and trim will depend upon the quality of the wood and the length of water submersion. Tongue and groove hardwood floors are unlikely to return to their original condition upon drying. Let them dry thoroughly. If the wood remains cupped after drying, you can decide whether to sand them flat or replace the flooring. Non-interlocking wood floors, such as plain pine boards, stand a good chance of returning to their original shapes when dried.

Damage to Interior Paint and Wallpaper

After the flood, most painted interior surfaces that were underwater will have to be repainted due to water damage or contamination. Do not paint until surfaces are completely dry. In most cases wallpaper will have to be replaced.

Floor Coverings

In almost all cases, carpeting and other floor coverings will need to be replaced if flooding was substantial.

Source: Treatment of Flood-Damaged Older and Historic Buildings, by Jim Sewell, Richard Wagner, Claudette Hanks Reichel. Available for free online at <http://www.preservationnation.org/resources/technical-assistance/disaster-recovery/>.

Note: This document is intended to provide general information. It should not be understood to offer legal, architectural, environmental, engineering or other professional services, or an opinion with regard to a specific property or condition. If legal, architectural, environmental, engineering advice or other expert assistance is required, the services of a qualified professional should be sought.