

# Steps to Reduce Flood and Water Damage

Kenneth Hellevang, Extension Engineer

**M**any things can be done before the snow melts or before a heavy rainstorm to reduce damage to home and property. This checklist can help you prepare to reduce the severity of water or a flood on your home and family.

## Home

- Check your sump pump.** Clean the sump pump and pit, and test the pump by lifting the float switch or pouring water into the pit. Consider having a spare submersible portable sump pump. Make sure the discharge hose delivers the water several feet away from the house to a well-drained area that slopes away from the house. If the hose outlet is too close to the house foundation or on flat ground, the water may simply recycle down through the house drain tile. Don't run sump pump water into a rural septic system because the water may saturate the drain field. In cities, running sump pump water into the sanitary system may overload the system and cause sewage backup, plus it may be illegal.
- Move valuables to higher locations.** Get items such as irreplaceable family photo albums, high school yearbooks, personal videotapes, tax records, insurance policies and household inventories off the bottom shelves in the lower level of your home.
- Move hazardous materials to higher locations.** This includes paint, oil, cleaning supplies and other dangerous materials.
- Move snow away from the house's foundation.** If the ground is sloped 1 inch per foot near the house, moving snow just 3 to 5 feet from the house will reduce problems.
- Keep water out of window wells.** Since windows can't withstand much pressure, build dams and contour the ground so water will naturally drain away from the house.
- Get downspouts in place** so that as snow melts they can carry the water away from the house. Using salt or a chemical to melt them free will probably damage the lawn.
- Plan an escape route** if certain roads or streets are known to flood easily. Where would you go if your home flooded — a local shelter, a family member or friend's house?
- Plan for pets.** Pets allowed in shelters due to health regulations. If left behind, stressed pets can damage your house, and their safety is at stake too.
- Assemble supplies in case the electricity goes off.** Gather water, food that requires no refrigeration or cooking, a non-electric can opener, a battery-powered radio and flashlight, extra batteries.
- Assemble supplies for a possible evacuation.** Gather water, nonperishable food, paper plates/cups and plastic utensils, extra clothing and shoes, blankets or sleeping bags, a first aid kit and prescription medications, cash and credit cards, important phone numbers, special items for babies and the elderly.
- Anchor fuel tank.** A fuel tank can tip over or float in a flood, causing fuel to spill or catch fire. Cleaning up a house that has been inundated with flood waters containing fuel oil can be extremely difficult and costly. Fuel tanks should be securely anchored to the floor. Make sure vents and fill line openings are above projected flood levels. If you have propane tanks that are the property of the propane company, you'll need written permission to anchor them, or you can ask whether the company can do it for you.

**❑ Plug basement floor drains with removable grids if sewer backup may occur.** Install drain plugs available from hardware stores. One type of plug has a rubber center that expands to fill the pipe when the top and bottom metal plates are squeezed. If a commercial plug is not available, a flexible rubber ball about 1¼ times the inside diameter of the pipe can be wedged into the drain to create a tight seal. Brace the ball securely in the drain with a two-by-four against the ceiling. Hold a board or piece of plywood on the ceiling and slide the two-by-four against the bottom of the board to avoid damage to plaster ceilings. For a suspended tile ceiling, remove ceiling tiles to get access to the ceiling joists. Span a two-by-four across the two joists and wedge the vertical two-by-four between it and the ball.

**❑ Cover basement floor drains with permanent grids.** Place a partially inflated inner tube around the drain, and top it with a square or two of plywood (not particle board). The plywood must be larger across than the inner tube to cover it. Brace this in place just as with the ball on the drain. Be prepared for some seepage.

**❑ Reduce flooding from other drains.** Unbolt toilets from the floor and plug the outlet pipe using the same procedure as for floor drains. Shower drains can be plugged this way too. Most washing machines and basement sinks have their drain connections about 3 feet above the floor so may not overflow if the water doesn't get that high. If necessary, these drains can be disconnected and capped or plugged with commercial plugs or braced rubber balls.

**❑ Prepare appliances for flooding.** Shut off appliances at the fuse box or breaker panel. Put freezers, washer, dryers and other appliances up on wood or cement blocks to keep the motors above the water level. If high water is imminent and large appliances can't be moved, wrap them in polyethylene film, tying the film in place with cord or rope. The water will still get in, but most of the silt won't so cleanup will be easier.

**❑ Shut off electricity to areas of the home that might flood.** Even if floodwaters are not reaching electrical outlets, the risk of electrical shock to someone working in a flooded basement is high with electric motors in the furnace, freezer, washer, dryer and other appliances. Shut off electrical breakers or unscrew fuses. Don't stand in water and turn off electrical switches. If this must be done, use a dry piece of wood or a plastic or rubber pole to do the switching, and stand on a block of wood or a plastic crate that doesn't conduct electricity. If floodwaters are getting close to the electrical entrance box, call the power supplier and have the electrical supply to the house disconnected. If the floor is damp but not really flooded, ground fault circuit interrupters reduce the risk of using electricity. In newer homes, interrupters can be identified by the buttons between the top and bottom outlets. They can be added to any outlet or in an extension cord to turn off the power if an electrical fault occurs.

## Family

- ❑ Discuss what to do** in case of a flood. Plan and practice an evacuation route.
- ❑ Ask an out-of-state family member or friend to be your family contact.** If family members get separated during an evacuation, each should get in touch with that contact. Make sure everyone has the contact's phone numbers.
- ❑ Discuss safe emergency procedures.** Teach adults and older children where service panels, water service mains and natural gas mains are and how to turn them off if necessary.
- ❑ Discuss the situation with children honestly and openly.** Hiding the situation from them will probably be even more stressful.

## For More Information

For more details about preparing for a flood plus information about cleanup after a flood, contact your county office of NDSU Extension or see

[www.ag.ndsu.edu/flood](http://www.ag.ndsu.edu/flood).