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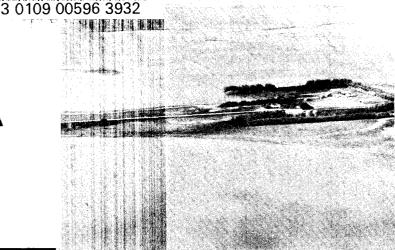
North Dakota State University Fargo, North Dakota 58102

NORTH DAKOTA STATE UNIVERSITY

A Checklist of Things You Can Do To Help In

Surviving A Flood

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NORTH DAKOTA

STATE UNIVERSITY most every year, somewhere in North Dakota, there is a flood. In a few areas it is almost a routine occurrence and people living there are very knowledgeable about pro-MAY 15 1978 tecting themselves and their property. To others it's a new experience.

LIBRARY

WHEN IT'S PREDICTED

- 1. Learn all you can about flooding in your area, so you'll know what to expect.
- 2. Keep informed of daily weather conditions and predictions. Be sure you have at least one portable radio with fresh batteries.
- 3. Make detailed plans to take care of the health, safety and comfort of all members of the family. People come first. Include:
 - Get refills of all prescription medicines and get supplies of all other medicines, such as insulin, vitamins, etc., that your family regularly uses.
 - b. Get a two weeks' supply of food, including special diet foods or baby food, but emphasizing food packed in sealed cans, that go together well in combinations your family likes, and that can be eaten cold if necessary. Move all regular food supplies where they will be safe and dry, or make workable plans to move them when the flood threat gets closer.
 - c. Assemble first aid supplies, hand tools, sheets of plastic and plastic bags in various sizes, flashlights with fresh batteries, and emergency household equipment, such as hand operated can openers, camp stoves with plenty of fuel, candles and lamps, rope and cord, and freshly serviced fire extinguishers. Get blankets and sleeping bags into a safe, accessible place.
 - d. Have all family vehicles serviced, have the gas tanks filled and keep them filled.

- e. Think through your normal plans for the total duration of flooding and clean-up. What can you cancel? Re-schedule? Do ahead of time? What can you postpone?
- f. Plan what you will do with pets, including horses. How will they be fed, watered, sheltered, kept from straying or becoming lost?
- g. Gather any important personal and business papers and make sure they are in a safe place. Take them to your bank safety deposit box if possible. Put them in a tight double plastic bag where you are certain they will be kept dry and available. Your house and other buildings may be wet and humid for quite a long time.
- h. Make records for insurance purposes. Take photographs but be sure there is a way of dating them and verifying the dating. Get your warranties, purchase records for appliances and furniture, necessary addresses, etc., and put them with your other important papers. Include family health records.
- 4. Disconnect all appliances and equipment not in regular use, and take them to safety if possible. If you can't take the whole item, consider removing motors, engines, or other parts that will have to be cleaned, dried and re-serviced if they get wet. If you can't remove carpeting, get big sheets of plastic to cover it to keep the silt deposits out of the pile. Have plastic to wrap around other appliances, equip-

44.3 79 3.628 ment and furniture you can't move. It won't keep out the water, but it will make clean-up a lot easier.

- 5. Fill all underground gas and fuel tanks to keep water out and add to their weight so they won't pop out of the ground. Seal them as tightly as possible, so the fuel doesn't float on top of the water and cause a fire or pollution hazard. Stake down all tanks, poles, irrigation pipe, etc., you can't move to safety. Put your name and address in some waterproof way (paint, stamp or engrave, etc.) on anything that might break loose or be floated downstream. You may have to positively identify it later. Include small buildings and such things as self feeders, calf sheds, small grain bins.
- 6. Electricity can be your greatest danger. Report all downed and low-hanging lines to your supplier immediately. Don't try to do anything with them yourself. Shut off all circuits you don't need and be prepared to shut off all electricity in each building and at the main power entry to your property. DON'T ENTER A WET BUILDING UNTIL YOU ARE CER-TAIN ALL POWER IS OFF, and don't turn it back on until all electrical equipment, connections, switches, boxes, etc., have been dried, cleaned and inspected by a professional. If your only choice is leaving electricity on or standing in water to turn it off, leave it on! Water and wet surfaces are excellent conductors. Prepare in advance and don't risk injury or death.
- 7. Drain melting snow away from all buildings, but particularly from grain or feed bins. A narrow trench through snowbanks is a lot better than nothing, but a wider channel will keep soil from washing away. Plastic around the base of the building may help keep water out. Remember that all grain and feedgrain products swell. Wet swollen grain not only loses germination, it molds, spoils, and heats. It can split your bins open. Make special efforts to get seed grain to a safe, dry place.
- 8. Move all agricultural fertilizers and chemicals, even those in plastic bags. Water can enter pinholes and unnoticed tiny rips or tears, and into screw tops. The materials will cake and be useless. If they get into the water they can kill your or your neighbor's livestock or damage crops and plantings. You might even be liable to a lawsuit.
- 9. If necessary and possible, move livestock and feed to high ground, and where they won't be able to drink flood water coming from a dis-

- tance. You don't know what disease organisms it may be carrying.
- 10. Move tractors and machinery to high ground if possible. It will save a lot of time later taking equipment apart, drying and cleaning it before it can be used. Move it away from buildings so it won't smash into them.
- 11. Work out plans with all members of the family, so everyone knows what is expected of him and won't panic or unduly worry. Make cooperative arrangements with neighbors on a "what if?" basis.
- 12. If you're planning to market livestock or grain anyway, get it out of the way before the flood water arrives and the roads go out. Check ASCS regulations and requirements on stored grain.
- 13. Make provisions for clean pure water for your family and your livestock. Have clean water-tight containers and disinfectants on hand. (Chlorine household bleach is a good standard disinfectant for water.)
- 14. If you're fairly certain you'll be flooded, assemble or locate equipment and supplies you'll need for the clean-up operation—fans, disinfectants, cleaning supplies, grain dryers, and some kind of heat source if the furnace can't be turned back on immediately.
- 15. Turn off gas at the meter or tank. Broken lines could result in serious fire and/or health hazards.
- 16. If sandbagging can help protect your property, assemble everything you'll need to do a good job.
- 17. Open basement windows so water can get in and equalize pressure. Protect those not removed with heavy screens to prevent breakage from debris in the water. Leave doors open rather than have them pushed in.

ENDURING THE FLOOD

- 1. Don't panic. Don't invite heart attack or injury by overexertion and strain lifting or moving heavy objects or loads. Keep people and livestock as comfortable as possible.
- 2. Keep your radio, CB, and/or other communication on and tuned to your best source of flood information. Keep your plans flexible so you can act quickly if change of plans will help you.

- 3. Don't move back too soon. An ice jam that temporarily lowers the water may provide a second crest at any time. So can a heavy rain somewhere upstream.
- 4. Don't be a "sightseer" or encourage it in others. It makes you a part of the problem rather than the solution. Don't go boating on flood waters. Current often is swifter than it looks.
- 5. Don't go into flood water unless it's absolutely necessary for rescue operations. These waters contain disease organisms and hide dangerous objects.
- 6. Don't try to rescue livestock from a small boat. Cut the fences and let them swim to safety.
- 7. If you're told to evacuate, go. Take only minimum, most important items—blankets, medicines, radio. Don't take shortcuts unless you are certain bridges, culverts, etc. are in. At this point, save your life.

WHEN THE WATER GOES DOWN

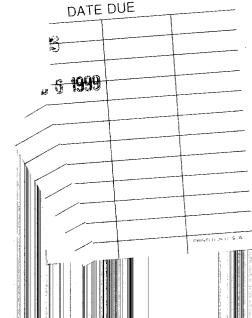
- 1. Enter buildings cautiously. Don't enter ANY wet building until you are SURE electricity is off. Don't smoke or bring in anything with an open flame.
- 2. Open all doors and windows possible. Remove stripping or hinges if necessary. Let the air blow through to carry off moisture, odors and flammable or toxic gases.
- 3. Don't be in a hurry to pump out your basement. The water helps brace the walls against the extra pressure of water-logged soil outside. If pumped too soon, floors may push up or walls cave in. Pump out about a third of the water each day. Use a gasoline powered pump or one connected to an outside line, not your own electrical system.
- 4. Turn the electricity back on, circuit by circuit, but only AFTER ALL BOXES, SWITCHES, ETC., HAVE BEEN DRIED, CLEANED, AND TESTED BY A QUALIFIED PERSON. All wet motors must be dried, cleaned, and rebuilt if necessary.
- 5. If your washer was flooded, pour disinfectant into it and run it through a full cycle at the "hot" setting.
- 6. Disinfect the dryer drum, refrigerators, freezers, etc., with 1 teaspoon of chlorine bleach to 1 gal-

- lon of water solution. Leave doors open until interior is completely dry before plugging in.
- 7. Get fans going and a heat source as soon as possible to help dry buildings.
- 8. Disinfect your well with laundry bleach. Determine the quantity of water in the well and system and add chlorine bleach at the rate of 2 to 4 gallons of bleach per 1,000 gallons of water. Mix this solution in the well through recirculation and run water from each faucet and hydrant until a strong chlorine smell is present, then shut it off. After chlorinated water has gotten to all parts of the system let it set for at least two hours and preferably over night. Then pump it out and flush all lines.
- 9. If water has accumulated in house partitions or outside walls, take off the baseboard and drill holes between the studs a few inches from the floor.
- 10. If your furniture has been wet and you can't work on all of it, make some hard decisions as to what is most important to you and concentrate on renovating that.
- 11. Delay permanent repairs until buildings are thoroughly dry.
- 12. Check all barns, pens, corrals, feedlots and pastures before turning livestock back in to remove all sharp or harmful objects that may have washed in. Check particularly for bags or other containers of pesticides or fertilizer. Livestock like the salty taste of fertilizer and it can kill them.
- 13. Rats and other animals may have moved into your buildings to escape the water. Get rid of all garbage and debris that might encourage them to stay, and get rid of the rats.
- 14. Have horses vaccinated for both eastern and western equine encephalitis. Standing water will encourage infestations of the mosquitoes that carry the disease as soon as the weather warms. Horses and people are susceptible.
- 15. Spread wet feeds out to dry. Use great caution in feeding moldy feed to any type of animal. It's not just the molds, but the toxins they produce, that are poisonous.
- 16. Wet hays and grains can heat. They may smolder below the surface for weeks before bursting into flame. Never go alone to check a heating

- situation. There could be charred pits or tunnels below the surface. Put a rope around your waist, or walk on long boards.
- 17. Watch livestock carefully. Flood waters can bring in disease organisms from many miles away. Malignant edema, blackleg, anthrax, salmonellosis, listeriosis, and swine erysipelas disease organisms can be waterborne. Call your veterinarian at once if an animal has any unusual symptom.
- 18. Keep livestock high and dry if you can. Having to wade in mud and water not only leaves them susceptible to foot rots, but softens the skin so they're more easily cut or bruised, and liable to infections.
- 19. Calf scours and pneumonia are threats in cold wet weather particularly if the animals have been stressed. Do all you can to keep them comfortable and well fed.
- 20. Don't force your livestock to eat silage that has been flooded, even though it may look good. The water may have leached out nutrients and acidity, and flood water may have brought in disease organisms.

- 21. If you can't send dead animals to a rendering plant, bury them deeply where any disease organisms they may have won't get into water veins, and where scavengers can't carry them around.
- 22. Get wet grain out of bins before it heats, molds, or goes out of condition. Take care of seed grain first.
- 23. Treat seed grain that has been wet and/or is going into cold, wet soil. Your county extension office has information on seed treatments. Treat only what you are going to use.
- 24. Unroll, clean and thoroughly dry all canvas conveyors or covers for your machinery, so they won't mildew and rot.
- 25. Don't attempt to start any engine until you're sure everything is in order. Don't try to start a tractor engine that has been submerged until it is completely cleaned inside and out. A steam cleaner is best.
- 26. Clean all wheel bearings of all dirt and debris. Carefully dry, oil or grease them. Turn over moving parts by hand to make sure they work freely.

For more detailed information, check with your local county extension office, or any other organization (Red Cross, Salvation Army, local flood relief committee, local Disaster Emergency Services, etc.) working in your area to aid flood victims.



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