How to Initially Assess Drainage Problems and Minimize the Damages Caused

In the case of a house with a basement that is filling with water, the first step is to determine where the water is coming from. Refer to the Fact Sheet Titled "Identify Type of Problem" for more information.

In every case where water is entering the lower levels of your building, an obviously important task is to move furniture and other things that may be damaged by water up to a higher floor.

Ways of initially addressing a problem, once it has been identified, are as follows:

SURFACE WATER OVERFLOW THROUGH BASEMENT WINDOWS, STAIRWELL OR DOORS

When the problem is being caused by surface water spilling over into a lower level, the first thing to do is to try to stop it, or to reduce how fast it is coming in. This can be done by placing sandbags on the ground around the outside of the windowwell, stairwell or other point of entry into the basement. Plastic sheets, garbage bags, tarps, rags, etc can be used to plug up small leaks through or around the sandbags.

If you know that your building may be prone to this type of problem, it may be a good idea to have sandbags ready for this before the storm begins. Placing a barrier to overflows is much easier to do before that condition starts because the moving water is difficult to deal with and may, in fact, be dangerous.

Some other materials that may be available can also be used for these temporary measures. Concrete blocks and/or boards can also be used for strength and support, while also using tarps, rags or other flexible materials to seal up any spaces between the boards, the building and the window-well.

SUBSURFACE WATER - SEWER BACK-UPS

If water rises up and out of the floor drain, it is usually because the sanitary sewer has backed up. This is not really a groundwater (i.e. subsurface water) problem per se, but may be occurring because of heavy rainfall causing water to enter the public sanitary sewer main (in the street). Water can also enter through the smaller service line running from the house to the public main.

A simple method to solving this condition may be with the installation of a riser-pipe on the floor drain. The sewage water is then allowed to rise within the pipe, but does not spill out onto the basement floor. Another possibility is to ring the floor drain with sandbags or another barrier, as described below under Sump Pump Failures and Seepage.

SUBSURFACE WATER - SUMP PUMP FAILURES AND SEEPAGE

Subsurface water can be a problem if it enters into the lower levels of a home through cracks in the wall or up through the floor. It can be a bigger problem when it drains into a sump pit at a rate that exceeds the capacity of the sump pump to pump it out.

Sump pumps can often fail just when they are needed most. Having a new pump available for replacement of a failed pump, or keeping an old pump that still works, is a good idea. This extra pump can be installed quickly as described below.

Because time is very important when trying to fix an emergency water problem, any connection clamps, pipe lengths, etc that are needed to install a replacement pump in an emergency should be the same as the one that is already in the sump pit. In this way, replacing the failed pump can be as simple as disconnecting a clamp on the discharge piping of the old pump, lifting it out of the pit, and replacing it with the new one. You should only need a screwdriver to do this.

If water is rising up and out of the sump pit and replacing the old pump is not possible - or if the power has gone out in the storm and a new pump would not help - the water can possibly be contained by ringing the sump pit with sandbags. Other materials may be used, or added to the sandbag barrier, to plug leaks and keep the water from seeping through the barrier and into the rest of the basement.

Seepage through cracks in walls or the floor usually does not flow rapidly into the basement and can often be directed to a floor drain initially. However, this is not an appropriate use for the floor drain, which, by law, is to drain only into the public sanitary sewer. The use of the floor drain for this should be discontinued as soon as possible, since this can cause sewage to back up into other homes.