

# Citizen's Flood Prevention Tips

## Weathering the spring snow melt

As warm weather approaches, the resulting runoff from snow melt and rain can create flooding headaches for those that aren't prepared. The spring snow melt is often exacerbated by frozen ground conditions, which prevents water from sinking into the ground. The result can be overloaded storm drains, and ponding of trapped runoff in low lying areas. Property owners can take precautions to help reduce the potential for flooding of their property.

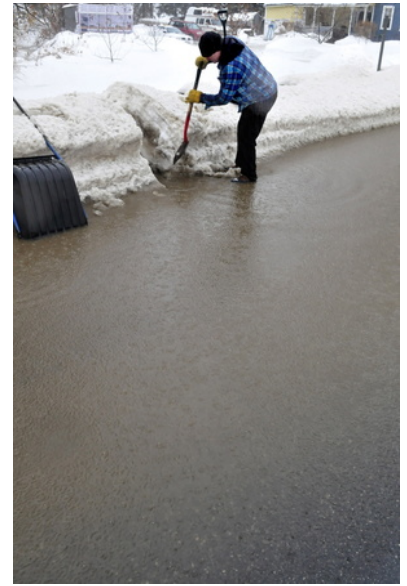
### Drain Basics

**Catch Basins:** In urban areas with curb and gutter, storm water is typically captured by storm drain inlets along the road (above right). These basins should be unobstructed to allow for proper drainage to occur. Basins obstructed by snow (below and right) and other debris can dramatically change flow patterns and cause flooding of homes and other structures (top right).

**Culverts:** Another common conveyance structure which can cause flooding are obstructed road and driveway culverts (bottom right). Drainage systems rely on many drainage structures to convey water safely downstream. An obstruction at any of these points can back up water far upstream, impacting many property owners. If you suspect a culvert is blocked, the appropriate utility owner should be contacted.

**Eaves Troughs:** They do more than prevent roof runoff from falling on your head. Your eaves system is critical to moving water away from the foundation of your home and preventing infiltration into your basement. One of the most common causes of basement flooding comes from obstructed eaves troughs. Clean them often!

**Safety First:** The power of water is frequently underestimated. Never enter an area of flowing water on foot or even in a vehicle. Water only a few inches deep is capable of sweeping an adult off their feet.



Road Flooding Caused by Obstructed Catch Basins



Unobstructed Catch Basin



Obstructed Catch Basin

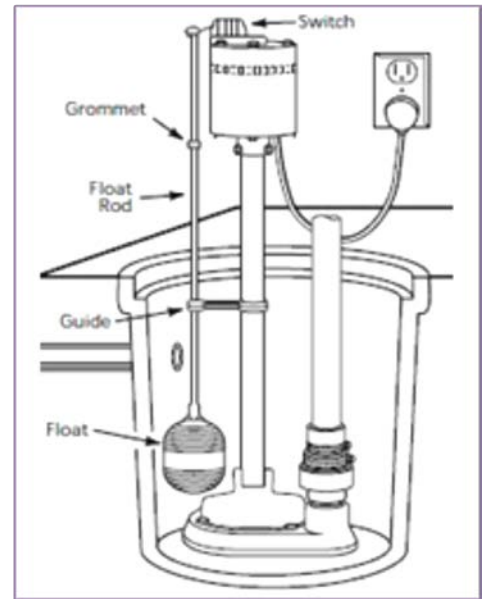


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## Flood Prevention Measures

- **Clear snow from normal drainage paths.** Piled snow is an effective dam which can cause homes and property to be inundated. Clearing a path to a lower elevation or drainage structure where water typically flows can prevent a lot of headaches.
- **Clear snow from around manhole and catch basin grates.** Clearing snow from around structures will prevent water from bypassing them and ending up on your property.
- **Check your sump pump.** The time to find out you have a problem with your sump pump is before you need it!
  - *Make sure floats are not tangled or wedged* between pipes and the sump wall. A wedged or tangled float can prevent the pump from turning on when needed.
  - *Test the sump.* Pour water into the sump or lift the float if water is present. The pump should start pumping and you should notice the water level in the sump receding.
  - *Don't assume that because your sump pump runs that everything is fine.* Check the end of your sump discharge line wherever it daylight on your property and clear any obstructions. Shallow buried lines can often freeze and prevent water from discharging.



## Who to call for help....

**For flooding emergencies where health and safety is at risk,** call 911 immediately.

**For drainage structures in private developments and road rights-of-way,** the association contact person or contractor should be notified.

**For drainage structures in public rights-of-way,** the local road commission should be contacted, or in the case of state highways, the Michigan Department of Transportation (MDOT). Additionally, your county drain commissioner may have jurisdiction over some of these structures as well.

**For flooding on your property not associated with a public or private agency.** These are often more difficult to deal with since government agencies typically have no legal right to affect drainage on private property. Contacting your local municipality and your county drain commissioner for direction should be your first step, if you cannot resolve the problem yourself. Look to local home improvement stores for items such as sandbags, shovels etc.

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## Flood Terminology

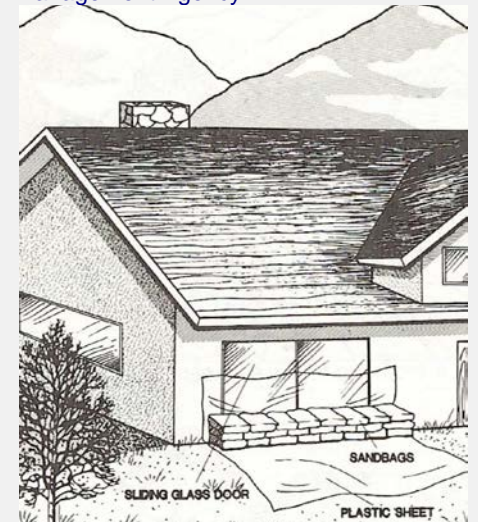
*Flood watch* means a flood is possible in your area

*Flood warning* means flooding is already occurring or will occur soon in your area.

*Flash flood* is a sudden violent flood

*100-year flood* means there is a 1% possibility that this particular area will be flooded in any one year. It is possible to have a 100-year flood more than once in the same year since these are probabilities

*FEMA* is the Federal Emergency Management Agency



Sand bag and plastic sheeting technique for protecting doorwalls from water infiltration.

