

I Have Water in My Basement!

A response by the Muskegon County Drain Commissioner, Brenda M. Moore

We have had numerous calls from throughout the county from people with water in their basements. Unfortunately, many of them are outside a formal drainage district, so this office is unable to provide immediate assistance. Even so, because groundwater can span over miles, there is only so much that can be done to address it seeping into basements.

This was a high water year in the county-- we had a large amount of snowfall coupled with heavy spring rains. Muskegon County received over 131 inches in snowfall this winter— nearly 11 feet. That is about 39 inches above average. Average rainfall for the area March-May was over 11 inches—much of that was record rainfall in April. Granted, the facts don't offer much comfort to the homeowner with water in their basement, but it does put things in perspective. Although there is very little we can do to control groundwater, we can share how people from across the county have protected their basements in different ways:

- Look at site grading and where downspouts discharge on your property, it may be bringing water back towards your house and basement. See also:
<http://learningcenter.statefarm.com/residence/maintenance/wet-basement-problems/>
- Using sump pumps, with a back-up pump, pump alarm, and generator (in case of pump or power failure) to pump water out of the basement (generally from sub-surface tiles). There is a danger if water is pumped too fast that soil can flush from under the footing and floor causing structural failure.
- Where walk-out basements allow surface water intrusion; removing the slider or door; adding a couple of blocks at floor level, then replacing the exit with a window. This slows the intrusion of surface water, but a sump pump is still generally needed.
- Waterproofing the footing or area below the groundwater level if water intrusion is in smaller amounts (a few inches). Dampness, mold, and mildew may still be a factor. See also:
<http://www.epa.gov/mold/moldguide.html>

Caution: If water is an issue at higher volumes, hydrostatic pressure of the groundwater pushing on a foundation that has been waterproofed can pop the floor, causing new leaks or structural damage to the home.

- Where there is room; some owners have filled basements and crawl spaces with sand, above the groundwater level, then capped the area with cement. This can solve the water problem but it does cost living space.
- If a full basement is desired it is possible to physically raise the home and add several blocks to the basement. This is the most expensive option, but it can give you a usable basement. As with the previous option the areas between the high groundwater mark and the bottom of the new basement area is filled with sand and capped with cement.

Regardless of your situation, it may help to speak with reputable engineers, contractors, house movers, or your local building inspector to choose the option best for your situation. It may be best to speak with a few people so you can feel comfortable you are getting consistent information.