This summer we have had record amounts of rain. With all this rain has come lots of basements full of water and questions to Cooperative Extension about how to dry out and protect our homes. This week, Art Nash, our energy specialist, has given us some words of wisdom on dealing with this influx of moisture.

By Art Nash

“There’s a whole lotta soakin’ goin’ on . . .” could be how the Jerry Lee Lewis song would go in Fairbanks this summer. We’ve broken records for rainfall, and it just keeps coming and going right into the ground. And, as many residents have found, it’s going from the ground into the basement.

With the ground saturated, there is hydrostatic pressure against the cinder block or cement walls of most homes’ foundations, which pushes water through cracks and breaks. In some areas of North Pole, where the water table is high, the water table is rising above the slab or gravel bottom of basements and crawl spaces respectively.

So, what can be done now while everything is wet? Certainly sump pumps can remove static water from the pools that have been created. What can you do now for the surface of the foundation walls and slabs? Thankfully, there are types of products that may help while the area is damp or even outright wet.

First of all, think of what your foundation is like at the moment. Because of the low humidity in Fairbanks, many home have a “dampproof” product on the foundation, but probably not whole waterproofing. Most likely, the outer wall of cement or cinder was treated with a roll-on, tar-like product to keep dampness out. And then the question often is, are there gutters, good underground tiling or flashing to protect any insulation against the outer cement wall? Often the answer is no.

In newer homes built in areas with wet soils, the contractor may have applied an outer waterproofing adhesive membrane to “wrap” the foundation. As wet as the soils are now,
it is not practical to dig up the soil next to the house and fiddle with outerwrap, and it would probably not adhere correctly.

Inside the basement or crawl space, however, there are some types of products that can work with damp (and some wet) block and slab imperfections. There are emulsion dampproofing products that permit moisture vapors to escape through the film while remaining resistant to water penetration. The products can be applied to “green” or not totally dry concrete with a trowel, brush or spray. They may run in Fairbanks around $70 for a 5-gallon pail.

There are cementitious crystalline concentrates that make claims of being able to “waterproof, protect and repair” concrete. Generally these are light powders mixed with water and put on as a slurry coat and run about $175 for a 50-pound bag. The most aggressive treatment though, is to use expanding Portland cement powders that mix one part of water to four parts powder. This material will clog and fill a hole or crack after curing in a wet environment such as a pool tunnel or wastewater treatment plant. In Fairbanks, it can be found at $120 for a 5-gallon pail.

If you are thinking about the future and the ground dries out, it’s a good idea to wrap your foundation with a waterproofing adhesive membrane, which runs about 70 cents a square foot.

If you have any questions about any of the products mentioned, feel free to call me at UAF Cooperative Extension at 907-474-6366 and I can help with data sheets of information for various products.

Roxie Rodgers Dinstel is associate director of Cooperative Extension Service, a part of the University of Alaska Fairbanks, working in cooperation with the U.S. Department of Agriculture. Questions or column requests can be e-mailed to her at rrdinstel@alaska.edu or by calling 907-474-2426. Art Nash, energy specialist for Extension, can be reached at 907-474-6366 or alnashjr@alaska.edu.