Flood Fight FAQs

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

ST. PAUL DISTRICT
March 14, 2011
MVP-PA-2011-029

Q: What does a "100-year flood" mean?

A: The term "100-year flood" is often used as an attempt to simplify the definition of a flood that statistically has a 1-percent chance of occurring in any given year. Likewise, the term "100-year storm" is used to define a rainfall event that statistically has the same 1-percent chance of occurring. In other words, during the course of 1 million years, these events would be expected to occur 10,000 times. Just because it rained 10 inches in one day last year doesn't mean it can't rain 10 inches in one day again this year. (USGS)

Q: What is meant by the term "flood stage"?

A: The National Weather Service, based on the desires of the local community, establishes the "flood stage" gauge height for any given community. The flood stage gauge height is often the stage where damages begin to occur. Many communities desire to use the flood stage gauge height as an early warning alert, prior to the onset of significant damages. Significant damages may not occur until river levels are several feet above flood stage. Additionally, conditions along some rivers may have changed since the gauge and flood stages were established and reaching the flood stage may or may not result in actual damages. Again, stages are site-specific, so feet above flood stage at one location can't be compared to another.

Q: What is meant by the term "river stage"?

A: A site-specific measurement of river-level referenced as the height in feet above a designated zero reference point, called the gauge zero, at the site. The zero reference point is sometimes, but not always, chosen as the elevation of the river bottom. Normally, stage values are always positive. Drought conditions could cause the river level to fall below gauge zero, and the stage reading at that time would be negative. Since each gauge was established independently at each location, the stage reading is good for that location only and cannot be compared to other locations. For example, a stage of 30 feet at Fargo, N.D., cannot be compared to a stage of 30 feet at Grand Forks, N.D. The only way direct comparisons between two gauges can be made is by converting river stage to elevation by adding the stage to the gauge zero elevation.

Q: What can the Corps of Engineers do to assist *before* and *during* a flood?

A. When all available local/state resources have been exhausted, the Corps can provide flood fighting supplies, such as sandbags and polyethylene, as well as contingency planning support, technical assistance and emergency, temporary levee construction. A governor's request must be made to engage Corps resources. Ultimately, the Corps is there to SUPPORT local communities and not lead the flood fight.

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