



foundation.

## NEWS FROM: The Region's One-stop Professional Claims Support Engineers

### Water, Water & more Water

Damage assessment by an engineer following a flood event may be broken down into categories. First, there will be questions regarding the origin of the damage and second, engineers may need to evaluate the extent of damage and provide a scope of repair.



Recent Floods in Michigan, Over 18,000 Homes Flooded,  
Photo by NOAA

EngTech-KPE provides Architectural, Electrical, Mechanical, Plumbing, Structural, Civil, Fire Protection, Chemical and Agricultural Investigative Engineers, and Fire Investigators. We also provide expert laboratory testing, analysis and insight. EngTech-KPE serves North Dakota, Nebraska, Iowa, and NE Colorado — plus the entire USA through our membership in the Investigative Engineers Association network.



The source of the water must be determined; was it flood waters flowing from a creek, river or other water way, or was it ground water, sewer back up, sump pump failure, or a combination of sources. The source of the water will likely affect insurance coverage and should be clearly defined by the evaluating engineer.

### Heavy rain and hail

Flood and water damage assessments may include evaluations of structural damage due to hydrostatic and hydrodynamic pressures. Structures may be lifted as a result of being buoyant in a flooded condition. Evaluation of foundations may need to be performed. Depending upon the forces of the floodwater, the weight of the building components and the connections to the foundation system, the structure may float from its

While the cause of the damage may seem obvious, conditions following a flood such as cracking in walls or ceilings, may not be related to the flood event. It is important to determine whether or not the damage existed prior to the flood event. Often damage that was present prior to a catastrophic event was unnoticed by the insured, who now believes the damage was the result of the event. The investigating engineer should be able to determine if the suspect damage was the result of a specific event.

Other services that may be required once the extent of the damage has been determined, include a scope of repairs to assist the claims adjuster in determining the value of the loss. Additionally, identification of construction or design deficiencies may be important factors to consider as they may have caused or contributed to the flood damage. All contributing parties must be identified as subrogation will be allocated to all parties who may have contributed to the loss. Moisture intrusion, microbial issues and air quality may also become issues or come into play.



Powerful lightning strikes near homes



Hail damage caused by severe storms in eastern Nebraska