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Extremely severe rain storms were experienced in the Coon Creek watershed of Wisconsin, USA, in August 2007 and June 2008. All areas received over 100 mm/24 hours and some areas received over 300mm/24 hours. No recurrence interval has yet been assigned to these storms but the 100yr/24 hours storm is only about 100mm/24 hours. The most noticeable damage in the basin was hundreds of mass movements, normally rare in the region. All observed mass movements were on slopes already undercut by human or stream action. Some tributaries were eroded, with much coarse sediment visible and appeared much like tributaries did in the early 20th century under the effects of poor land use. Downstream in the main valley, sometimes large splays of coarse sediment, mostly sand, were deposited on floodplains, but very little sediment apparently left the basin, a finding which contradicts conventional wisdom in fluvial geomorphology. On the uplands, there was visible rill and gully erosion on small areas of heavily grazed pasture and from recently-tilled fields. But a major finding of this study was that there was very little erosion from agricultural fields using no-till techniques, even when slopes exceeded 800 m in length and 20% in slope.