## Worst-Conceivable Storm Profile

## The 38 inch, 72 hour storm has the following profile...

It starts with the worst-case **6-hour** storm of around **27 inches**; this is the killer. 71% of the storm total falls in the first 6 hours.

It follows into the worst-case **12-hour** storm of **30 inches**, dropping another 3 inches over hours 6 to 12. (80%)

It then transitions to the worst-case **24-hour** storm of **33 inches**, dropping 3 more inches in hours 12-24. (87%)

It continues to drop 3 more inches in day two, bringing the total to **36 inches**; the worst **48-hour** storm. (95%)

In day 3 the storm slows a bit, dropping the last 5% or 2 inches, bringing the total to **38 inches in 72** hours...

## It is the initial 4.5 inches per hour for 6 straight hours that establishes the peak 39,000 cfs flow and fills up the Lake.

For perspective, these storms/rainfalls are almost exactly 4 times the worst that have occurred in the last 125 years of recorded history. (Johnstown area) Our spillway today can handle rainfall of half these worst-conceivable amounts (twice the ever-recorded maximums), continuously... forever