

Flooding could be dramatic in storm's aftermath, expert warns

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University at Buffalo engineering expert Joseph Atkinson can discuss how flooding could affect Western New York communities as warmer weather settles over areas that received massive amounts of snowfall this week.

Atkinson, an expert in [fluid mechanics](#) and hydrology, says the risk of substantial flooding is real.

"There is simply a lot of [water](#) piled up that has to go somewhere when it melts," he says. "The main factors that will affect flooding are rate of [snow](#) melt (and any additional rain water), soil saturation levels and the capacity of streams draining the region.

"I don't know how much flooding there could be, but I suppose one could make an estimate by looking at previous large storms," he adds. "You get about about an inch of water entering the system for every 10 inches of snow that melts. So if all the snow in the hardest hit areas melts in two or three days, we are looking at something on the order of 2 to 3 inches per day of water entering the system for three days."

Not all of that water will remain above ground and cause flooding, but the heavy volume poses a substantial risk for affected communities, he says.

Provided by University at Buffalo

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