## PROBABILITY OF FLOODING

Because of seasonal fluctuations, rivers create streambank channels with a high temporary water storage capacity. To predict bank overflow, scientists look at discharge records and calculate the probability of floods. A 50-year flood is capable of inundating an entire floodplain to a level equivalent to the depth of the original stream channel.

A 100-year flood is twice the magnitude, and there is $1 \%$ annual probability of a flood this size. "Probability" is just a statistical manipulation, using mean time between flood intervals, and it is hard to understand. An annual probability of flooding of $1 \%$ can also be said like this: there is more than 1 chance in 6 over a 20 -year period you'll experience a flood; or, there is more than 1 chance in 4 over the life of a 30-year mortgage.

It's all in the language. Even explaining it in risk terms belies the face that there is no certainty. Two 50-year, or two 100-year floods can occur in one year, as we know.


