## Ready for the (wet) Big One?

## Sacramento Bee, 1-22-11

Ready yet to build an ark?

That would be the understandable response to a U.S. Geological Survey study last week that puts into perspective the state's potential for flooding.

According to the study, California tops all other regions in the country for the risk of catastrophic storms - including one that could last for nine straight days and inundate parts of the state.

These types of intense tropical storms don't occur often - the last major one was in the early 1860s - and there is no telling when another could strike. The geological record suggests California has experienced such a storm every 160 years to 400 years dating back to A.D. 212, but the past may not be a reliable indicator of the future.

Regardless of when one could strike again, the USGS report is helpful in reminding the public that California, and the Central Valley in particular, face an unacceptable risk of inundation in any particular winter. Flood-control districts, helped by state bond money, are working hard to upgrade levees in Yuba, Sutter and Sacramento counties, among others. Yet even when they complete their current work, most of these agencies will be able to achieve only 200-year protection, which translates to one in a 200 chance of flooding in any given year.

That's a lot better than current standards, but still not strong enough to hold up against a 500-year storm, the scenario laid out in the USGS report.

Given the risk and all the uncertainties, residents who live behind levees would be wise to buy flood insurance, even if not required to do so by federal authorities. Currently, only about 12 percent of property statewide holds such coverage, suggesting that many owners of homes and businesses don't take seriously the risk of flooding. Prior to Hurricane Katrina, many of their counterparts in New Orleans took a similar gamble, and lost.

The geologic record doesn't lie. Soil samples have left a clear trail of evidence that mega-storms have hit the state on at least six previous occasions in the last 2,000 years.

California faces numerous hazards, ranging from mudslides to earthquakes to tsunamis and wildfires. But when the Big One strikes next, it could well be in the form of water - in an enormous volume.