

Scientists: Rising seas will flood historic sites

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Story Highlights

- Scientists: Rising seas will likely swamp Jamestown, Virginia
- Other sites threatened: Wall Street, Silicon Valley, the Outer Banks
- Oceans are expected to rise by about 39 inches over the next century

(AP) -- Ultimately, rising seas will likely swamp the first American settlement in Jamestown, Virginia, as well as the Florida launch pad that sent the first American into orbit, many climate scientists are predicting.



Rising waters will flood the first American settlement of Jamestown within a century, scientists predict.

Experts say that protecting America's coastlines would run well into the billions and not all spots could be saved.

And it's not just a rising ocean that is the problem. With it comes an even greater danger of storm surge, from hurricanes, winter storms and regular coastal storms, Boesch said. Sea level rise means higher and more frequent flooding from these extreme events, he said.

All told, one meter of sea level rise in just the lower 48 states would put about 25,000 square miles under water, according to Jonathan Overpeck, director of the Institute for the Study of Planet Earth at the University of Arizona. That's an area the size of West Virginia. The amount of lost land is even greater when Hawaii and Alaska are included, Overpeck said.

The Environmental Protection Agency's calculation projects a land loss of about 22,000 square miles. The EPA, which studied only the Eastern and Gulf coasts, found that Louisiana, Florida, North Carolina, Texas and South Carolina would lose the most land. But even inland areas like Pennsylvania and the District of Columbia also have slivers of at-risk land, according to the EPA.

This past summer's flooding of subways in New York could become far more regular, even an everyday occurrence, with the projected sea rise, other scientists said. And

New Orleans' Katrina experience and the daily loss of Louisiana wetlands -- which serve as a barrier that weakens hurricanes -- are previews of what's to come there. Florida faces a serious public health risk from rising salt water tainting drinking water wells, said Joel Scheraga, the EPA's director of global change research. And the farm-rich San Joaquin Delta in California faces serious salt water flooding problems, other experts said.

"Sea level rise is going to have more general impact to the population and the infrastructure than almost anything else that I can think of," said S. Jeffress Williams, a U.S. Geological Survey coastal geologist in Woods Hole, Mass.

Even John Christy at the University of Alabama in Huntsville, a scientist often quoted by global warming skeptics, said he figures the seas will rise at least 16 inches by the end of the century. But he tells people to prepare for a rise of about three feet just in case.

Williams says it's "not unreasonable at all" to expect that much in 100 years. "We've had a third of a meter in the last century." The change will be a gradual process, one that is so slow it will be easy to ignore for a while. "It's like sticking your finger in a pot of water on a burner and you turn the heat on, Williams said. "You kind of get used to it."