

Rising sea levels could take economic toll on California beaches

A state-commissioned study by San Francisco State says erosion and storm damage by the advancing ocean over the next century could cut into tourism and tax revenue.

Tony Barboza, Los Angeles Times, 9-14-11

As rising sea levels eat away at the California coastline over the next century, the advancing ocean could cause hundreds of millions of dollars in damage to beach communities as tourism and tax revenue is swept away, according to a state-commissioned study released Tuesday.

As climate change warms and expands the ocean, increased storm damage and erosion will narrow the state's beaches and diminish their appeal to both tourists and wildlife, economists at San Francisco State predict.

"You need a certain amount of space for people to recreate, and, as beaches erode, you lose beach size and you lose tourism," said study author Phillip King, associate professor of economics at San Francisco State.

The study, commissioned by the California Department of Boating and Waterways, looked at five California beach communities, using sea-level-rise projections to estimate economic losses from flooding and beach erosion.

Venice Beach, for instance, could lose up to \$440 million in tourism and tax revenue if the Pacific Ocean rises 55 inches by 2100, as scientists predict.

A drop-off in visitors to an eroded Zuma Beach and Broad Beach in Malibu would cost as much as \$500 million in tourism spending and tax revenue, the study found.

The effect of more destructive storm surges and higher tides would reverberate through the local and state economy, researchers said.

The ocean's expansion would be particularly hard on Southern California, where the heavily used shoreline generates big bucks to businesses, which pass some of it on to local governments in taxes.

Elsewhere in the state, homes and roads would be particularly vulnerable.

At San Francisco's Ocean Beach, the increasingly erosive power of storm surges could cause \$540 million in damage to land, buildings and infrastructure by century's end, researchers project.

The study also examined beaches at Torrey Pines in San Diego County and Carpinteria in Santa Barbara County.

The research underscores the pressing need for beach communities to adapt to the rising waters by building sea walls, replenishing beach sand or pushing homes and structures away from the shoreline, King said.

"Sea-level rise is here," King said, "and we need to start planning for it."

The ocean has risen about 8 inches in the last century and is expected to swell at an increasing rate with global

warming.

But California may have been spared the full strength of the ocean's advance for the last few decades, recent research suggests.

Earlier this year, scientists at Scripps Institution of Oceanography at UC San Diego found that while sea levels rose around the globe, they were on hiatus on the U.S. West Coast for the last three decades because of a pattern of cold surface waters.

But that trend may be reversing, the study found, and an era of accelerated sea-level rise could begin this decade.