

# Steyer group forecasts rising tide of natural, economic misery in Calif.

**Anne C. Mulkern, Environment & Energy Publishing, 4-3-15**

California faces extreme heat, repeated droughts, wildfires and sea-level rise that could submerge \$10 billion in property by 2050 because of climate change impacts, a report from billionaire environmentalist Tom Steyer's Risky Business Project said yesterday.

Steyer, along with former New York City Mayor Michael Bloomberg (I) and past Treasury Secretary Henry Paulson, issued the 65-page analysis on California as the third in a series of studies calculating the costs of inaction on climate.

"From Boom to Bust? Climate Risk in the Golden State" looked at warming's effects on major businesses that include agriculture, manufacturing and tourism. California crops, which are shipped nationwide and overseas, could see production declines because of heat and drought, the report said.

Californians by the end of the century will live in a much hotter place, it said. There likely will be two to three times as many days with temperatures exceeding 95 degrees Fahrenheit than have occurred annually over the past 30 years. That could contribute to nearly 7,700 additional heat-related deaths per year by late in the century, more than twice the average number of traffic deaths annually in the state today, it said.

"Climate change is an urgent threat -- one which the people of California are already experiencing firsthand," Steyer said in a statement. "The Risky Business report puts the costs of inaction on climate change in a framework that our state's businesses can understand and utilize to mitigate risk and make good choices for California's communities and economy."

The report follows last year's 56-page "Economic Risks of Climate Change to the United States" and a report in January called "Heat in the Heartland," which looked at threats to the Midwest.

Although it's focused on California, the report noted that there are broader implications from events in the Golden State. In 2012, it said, California produced one-fifth of the nation's supply of dairy, nearly two-thirds of its fruits and nuts, and over a third of its vegetables. The state is the sole U.S. grower of almonds, artichokes, dates, grapes, pistachios, plums, pomegranates and walnuts.

"Overall, the state's 80,500 farms directly employed roughly half a million people at harvest time and generated nearly \$45 billion in output in 2012, as well as supporting at least \$100 billion in related economic activity," it said. "California's agricultural productivity is inextricably tied to climate conditions, and the industry's success is of critical importance to the state, the nation, and the world."

California houses more Standard & Poor's 500 index companies than any other state, the report said, leads the nation in venture capital and has the world's eighth-largest economy.

"Climate change -- and the resulting high temperatures, volatile precipitation patterns, and rising sea levels -- may put California's competitiveness at risk," the report said.

The Risky Business group in a statement said that although there are potentially large costs from climate impacts, the state "can significantly reduce these risks if policymakers and business leaders act now to reduce emissions and adapt to a changing climate. While state action alone will not be sufficient to avoid

the worst impacts of climate change, California can be a model of climate leadership for the nation and the world."

Steyer, who is worth an estimated \$1.6 billion, last year spent \$74 million of his money to support candidates across the country who agreed with his environmental positions and to oppose those who didn't. The San Francisco Bay Area resident briefly considered but decided against running for the seat Sen. Barbara Boxer (D) will leave in 2016.

Putting out the California-focused report could help Steyer if he wants to run for California governor in 2016, said David McCuan, a professor of political science at Sonoma State University and an expert on state elections. Lt. Gov. Gavin Newsom (D) has said he's exploring running for that office.

"The fact that they are more California-centered tells me he is a more credible alternative to Gavin Newsom moving forward," McCuan said.

Matt James, executive director at nonprofit Next Generation and a Steyer adviser, didn't immediately respond to an inquiry about whether Steyer would be interested in the 2018 gubernatorial race.

Kristina Moore, managing director at FTI Consulting, which represents fossil fuel interests, said that "Steyer's anti-fossil-fuel agenda failed spectacularly in the last election. This report is just politics dressed up as facts."

She said "there's no coincidence" that the report has come out at the same time that Steyer's Next Generation is winding down and moving into another Steyer group focused on climate change.

### **Rising seas threaten San Diego**

The report includes overall projections for the state that carry large price tags. If the world stays on its current emissions path, it said, between \$8 billion and \$10 billion of existing property in California will likely be underwater by midcentury. An additional \$6 billion to \$10 billion will be susceptible to flooding at high tide.

"By 2100, the value of property below mean sea level will likely grow to \$19 billion, with \$33 billion more at risk at high tide," it said. "There is a 1-in-100 chance that more than \$26 billion worth of California's coastal property will be underwater with more than an additional \$68 billion vulnerable at high tide."

The analysis also includes regional data. San Diego is among the most vulnerable areas of the state to increased sea-level rise, it said.

"Our analysis suggests likely sea-level rise of 1.9 to 3.4 feet along the city's coast by 2100," it said, "with a 1-in-20 chance of more than 4.1 feet and a 1-in-100 chance of more than 5.5 feet."

The report noted that San Diego has "significant strategic importance to the U.S. military: the city is home to three Marine installations, including Marine Corps Base Camp Pendleton; three naval bases; and a Coast Guard station. All have significant coastal assets."

In San Francisco and nearby Monterey and Point Reyes, sea-level rise of 0.7 to 1.1 feet by midcentury and 1.8 to 3.3 feet by next century is likely.

"There is a 1-in-100 chance that San Francisco could see sea-level rise of more than 5.4 feet by 2100," the

report added. "Extensive development along San Francisco Bay places billions of dollars of property and infrastructure at risk, including the headquarters of numerous technology companies in the South Bay area, along with the San Francisco and Oakland airports."

The state, known for its beautiful weather, could see that weather change, the report said. By the end of the century, it said, summers in California likely will be hotter than summers in Texas and Louisiana today, with a doubling or tripling in the average number of days per year hotter than 95 F.

Residents in some parts of the state could live with scorching heat for half the year by 2100, it said. The area it called the "Inland South" -- roughly the southeastern quarter of the state -- already has an average of about four full months each year of days above 95 F. That could increase by an additional month by midcentury, and to six months a year by 2100.

"There is a 1-in-20 chance that the region will experience more than seven full months (214 days) of extremely hot days by end of century," the report said.

The analysis didn't take into account potential adaptation strategies that California's industries and policymakers "will surely pursue in the face of shifting climate impacts," the report said. "These potential responses are frankly too varied and speculative to model with any certainty; they also may depend on policies and technologies not yet commercialized."

### **Getting businesses on board**

The numbers in the Risky Business report sound reasonable, said Jeffery Greenblatt, a scientist at Lawrence Berkeley National Laboratory. He had not seen the report ahead of its release yesterday but was told the basic concepts in it.

California already is a leader on efforts to limit climate change, he said. Existing and planned policies will significantly cut the state's greenhouse gas emissions through 2030, though more is needed to propel reductions through the middle of the century, according to a study he published in January.

"We are taking action," Greenblatt said. "There's a whole slate of policies that are on the books that are being implemented. The governor in January announced more ambitious climate targets."

Gov. Jerry Brown (D) in his inaugural speech said he wanted half of California's electricity to come from renewable sources by 2030, wanted to cut petroleum use by as much as half and wanted to double the efficiency of existing buildings by 2030.

"There's a lot of positive momentum that is moving us in this direction," Greenblatt said.

But Kirsten James, senior manager for California policy at Ceres, a nonprofit working to mobilize businesses behind an environmentally sustainable economy, said the specifics in the latest Risky Business report could help motivate further action.

"When you start looking at it at the regional level, then people can really relate to it," James said. "It really hits home more and hopefully will open eyes."

California is looking to extend its climate policies with S.B. 32, legislation that would have the state's air regulators develop interim targets to get the state's greenhouse emissions to 80 percent below 1990 levels by 2050. Having businesses aware of and supporting the need for climate action is crucial, she said.

"We're definitely setting the stage in leadership on climate, but it's still a tough fight," James said. "It is going to be a fight in Sacramento. Nothing is a slam-dunk up there."