

The HayWired Scenario Rollout

Kenneth W. Hudnut, Anne M. Wein, Dale A. Cox,
Keith A. Porter, Laurie A. Johnson, Suzanne C. Perry,
Jennifer L. Bruce, Drew LaPointe, and Shane Detweiler

The U.S. Geological Survey (USGS) is leading the HayWired earthquake scenario, which examines the likely effects of a large earthquake in California's San Francisco Bay region. This hypothetical earthquake is only one of many plausible events that could be the region's next big earthquake. The name HayWired speaks to the threat of earthquakes on the Hayward Fault and the vulnerabilities and strengths posed by the interconnectedness of the bay region's people, utilities, roads, and economy—including the digital economy.

The HayWired scenario anticipates the impacts of a hypothetical magnitude (M) 7.0 earthquake (mainshock) and its aftershocks on the Hayward Fault. The fault is along the east-bay side of San Francisco Bay and is among the most active and dangerous in the United States, because it runs through a densely urbanized and interconnected region with a population of more than 7 million people. The scenario explores the hazards associated with strong ground shaking, landslides and liquefaction, as well as potential damage to water supplies and buildings, and the potential effects of fire following earthquake, among other topics.

The HayWired Scenario was developed to guide residents of the bay region and policymakers in earthquake risk reduction and resilience-building actions. Such actions taken now, before an earthquake, will help reduce injuries, damage and losses to buildings and infrastructure, and the number people displaced from their homes, shortening the bay region's recovery time when the next earthquake occurs.

The first HayWired earthquake scenario report (detailing the seismic hazards) was published in April 2017 while the second (detailing the engineering implications) was released in April, 2018. When released, these reports are made available at <https://doi.org/10.3133/sir20175013>). Since then, the USGS and its partners in the HayWired Coalition and the HayWired Campaign have been working to energize

residents and businesses to engage in efforts to prepare the region for a future earthquake. Planned future contributions to the HayWired scenario include exploring societal and economic impacts and these will be released as they become available.