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FOR IMMEDIATE RELEASE

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Alexandria, Va. — Hurricane Sandy struck the U.S. East Coast in October 2012, leaving about \$65 billion of damage in its wake and raising the question of how to mitigate the damage from future storms. It's a question that arises in the wake of most natural disasters: What steps can society take to protect itself from storms, floods, landslides, earthquakes, tsunamis or volcanic eruptions? But the question itself illustrates the complexity of preparing for natural disasters.

Our first instincts might be to protect ourselves as well as possible, but reality sets in quickly: Society has finite resources. Resources used to mitigate potential hazards are not available for other purposes. For example, funding higher levees to reduce flooding competes with plans to improve highways. And money spent making school buildings earthquake-resistant cannot be used to hire teachers. Communities thus face the fundamental question of deciding how much mitigation is enough.

Prioritizing is always hard, but it is especially difficult for natural hazards, because of the scientific inability to forecast the future. But prioritizing is not impossible, says Seth Stein, author of "Playing Against Nature: Integrating Science and Economics to Mitigate Natural Hazards in an Uncertain World" and the Deering Professor of Geological Sciences at Northwestern University. Formulating natural hazard policy should involve combining science and economics to analyze a problem and explore different options, recognizing that the future is uncertain. Read more about the ways to figure out the optimal amount of mitigation in the December issue of EARTH magazine: http://bit.ly/1xxyj1J.

For more stories about the science of our planet, check out EARTH magazine online or subscribe at www.earthmagazine.org. The December issue, now available on the digital newsstand, features stories on a huge set of dinosaur tracks found in Alaska, hundreds of methane seeps found along the U.S. East Coast, and snow triggering earthquakes on Mount Rainier, plus much, much more. Be sure not to miss the year-end musings of EARTH staff and contributors as well!

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source for the science behind the headlines.

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