

# **A Sustainable Environment: Our Obligation to Protect God's Gift**

by  
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## Climate Change is Already Affecting Our Lives

For many years, scientists have been reporting that we need to mitigate climate change for the benefit of the planet, but in particular for our grandchildren. About seven years ago, I had the opportunity to meet with James Lovelock, the top climatologist in the U.K. and the author of several books including "The Vanishing Face of Gaia". He recommended that I buy land in Canada, not for myself, but for my grandchildren because they won't be able to live in the Chicago area. It will be too warm. To confirm his concern, around the same time the Commissioner of the Chicago Department of Environment presented some data that show the average temperature in the Chicago area today is about the same as the average temperature in Champaign, IL about 30 to 40 years ago. It is just getting warmer here.

More recent reports, however, connect global warming to the increased risk and severity of certain classes of extreme weather, including some heat waves, floods and drought. This is similar to the surgeon general's 1964 report connecting smoking to lung cancer. Climate change should not be viewed as a distant threat that may disrupt the lives of our children and grandchildren, but one that may be singled out as a factor, possibly a critical factor, in the storm that flooded your basement last week or ripped the roof off your house. The science of extreme weather attribution is bringing climate change right to our homes.

Understanding how climate change is having an impact on extreme weather is critical for insurers, policy makers, engineers and emergency managers as they assess the risk of a particular community and plan on how to make it more resilient. The combination of resiliency and adaptation is now more important than becoming environmentally sustainable. Why? The former is for today while the latter is for the future. This knowledge can help steer decisions on where and how to build or rebuild after a storm or flood, or whether to build or rebuild at all.

Climate change is the cause of some long term threats like rising seas, acidifying oceans, and the gradual extinction of species. However, we need to be more concerned with the immediate impacts of climate change. Insurance companies have assessed risks and their associated insurance rates based on the history of that event occurring. A 100-year flood means that a particular river or stream will cause a flood once every 100 years. These kinds of events are now happening more often and that 100-year flood may now have to be changed to, say, a 10-year flood. In addition to a possible more often climate related event, the insurance rate will no doubt increase accordingly.

Heat waves, for example, are expected to become more common, intense and longer because of the increase in greenhouse gases in the atmosphere. A recent study found that an extreme heat wave last May in Australia was made 23 times more likely because of climate change. This probably would not have happened if it weren't for climate change.

While the frequency and intensity of these extreme weather conditions can be attributed to climate change, this is not always the case. For example, in a severe drought plaguing southeastern Brazil — including São Paulo, with a surrounding metropolitan population of about 20 million — some were quick to blame global warming. But in analyzing the underlying causes of this drought, Heidi Cullen who is with Climate Central, found that climate change was not a major influence. Instead, population growth, increasing water consumption and leaky pipes were the real culprits.

Making changes in our lifestyle to mitigate environmental damage is getting more important every day, not just every year. This applies to government bodies, corporations, non-profits, and individuals as well. These changes will help minimize these extreme weather changes as well as the long-term impact on our planet. Another recent study predicted that by the year 2100, 13 million people in the U.S. could be displaced by rising sea levels. And it will only get worse from there. To see what would happen if all the ice on the earth melted, just watch the video at [http://www.businessinsider.com/what-earth-would-look-like-if-ice-melted-world-map-animation-2015-2?utm\\_source=microsoft&utm\\_medium=referral&utm\\_term=windowsapp](http://www.businessinsider.com/what-earth-would-look-like-if-ice-melted-world-map-animation-2015-2?utm_source=microsoft&utm_medium=referral&utm_term=windowsapp).