

Monday, June 24, 2019

Testimony on Resolution 864 declaring a climate emergency, Council of The City of New York

Dear New York City Council Committee on Environmental Protection;

My name is William J. Ripple. I am a distinguished professor of ecology at Oregon State University, the director of the Alliance of World Scientists. We have more 15,000 scientist members from 170 countries and we work on getting environmental policies that are based on sound science. I am also the lead author of the World Scientists' Warning to Humanity: A Second Notice (Ripple et al. 2017) which has 21,000 scientist signatories at this time. The views that I present below are mine and may or may not reflect those of my employer, Oregon State University. My job title is used for identification purposes only.

This year marks the 40th anniversary of the First World Climate Conference in Geneva, (1979) where scientists from 50 nations agreed that it was "urgently necessary" to act because of alarming trends on climate change. Since then, we have had the 1992 Rio summit, the 1997 Kyoto protocol, the 2015 Paris Agreement, and scores of other global assemblies and even warnings from scientists, but with little apparent progress (Ripple et al. 2017). Greenhouse gas emissions are still rising and so are the disastrous effects of our shifting climate. A great change in our stewardship of our biosphere is needed soon if massive human suffering is to be eluded.

The science on climate change is clear. Especially disturbing are the trends of climatic impacts in recent decades. Significant increases are continuing for global surface temperature, ocean heat content, extreme weather events and costs, sea level rise, ocean acidity, and total area burned in wildfires. Globally, ice is rapidly disappearing, as evidenced by trends in minimum summer Arctic sea ice, Greenland and Antarctic ice sheets, and glacier thickness from worldwide samples. Given these trends, the time is running out for successfully mitigating climate change and adapting to climate change.

With a few exceptions, and despite a major global attempt spanning 40 years, humanity has generally conducted business as usual and is failing to make significant progress in addressing this crisis. Climate change has already arrived with force and is happening much faster than many expected. It appears to be more severe than scientists anticipated and it is increasingly threatening natural ecosystems and the fate of humanity. Worrisome are potential climate tipping points and the nature's feedbacks that could lead to catastrophic climate change and a "Hothouse Earth" well beyond the control of humans. We immediately need to transition to a sustainable future with bold changes.

Given this climate crisis, I urge you to pass Resolution 864 in declaring a climate emergency.

William J. Ripple



References

Ripple, W.J., Wolf, C., Newsome, T.M., Galetti, M., Alamgir, M., Crist, E., Mahmoud, M.I., Laurance, W.F. and 15,364 scientist signatories from 184 countries, 2017. World scientists' warning to humanity: A second notice. *BioScience*, 67(12), pp.1026-1028.