

PUERTO RICO CLIMATE CHANGE COUNCIL

FOREWORD

In 2007, the Intergovernmental Panel on Climate Change (IPCC) of the United Nations Framework Convention on Climate Change released its Fourth Scientific Report. This report recognized the need for the mitigation of Global Greenhouse gases emissions to offset or to reduce emissions below current and projected levels. This Convention defines climate change as:

...a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

That year, over one hundred scientists signed the “Puerto Rico Declaration on Climate Change” and the Sea Grant program convened a round table discussion “Facing the Consequences of Climate Change in Puerto Rico” where researchers and experts of various disciplines evaluated potential effects and impacts, as well as mitigation and adaptation alternatives to global changes. As a result of these initiatives, the Executive Order 2008-09 of February 29th, 2008 was issued establishing the Strategic Affairs Commission to Mitigate Global Warming and Adaptation to Climate Change. These efforts captured the citizenry’s attention through intermittent press releases.

In 2009, the Academies of the Group Eight + Five (G8+5) integrated by the largest economies of the World: Canada, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States plus the emerging economies Brazil, China, India, Mexico, and South Africa, unanimously recognized the need to combat the climate changes associated to human activities. That year, the Department of Natural and Environmental Resources (DNER) through the Puerto Rico Coastal Zone Management Program (PRCZMP) developed the Puerto Rico Climate Adaptation proposal. This proposal was approved by the National Oceanic and Atmospheric Administration (NOAA) as the Puerto Rico Coastal Adaptation project. The NOAA also approved a 2-year fellowship to support PRCZMP’s project coordination.

In 2010, over 50 researchers, planners, economists, architects, sociologists, health professionals, and hydrologists, as well as several other professionals and experts of other fields relevant to the study of climate variability and change met and agreed to contribute to assess potential effects and impacts associated to climate variability and change in Puerto Rico. The main objective of the initial group was to assess the vulnerability of coastal communities, critical infrastructure, and biodiversity and to initiate the development of adaptation strategies. However, it was necessary to broaden the scope of work as new members from other sectors and disciplines joined the group. This group of volunteers adopted the name Puerto Rico Climate Change Council. The Council’s work was conducted under four sub-groups: (1) Geophysical and Chemical Scientific Knowledge; (2) Ecology and Biodiversity; (3) Economy and Society; and (4) Communicating Climate Change and Coastal Hazards. The Puerto Rico

Coastal Zone Management Program coordinates and serves as Executive Secretariat of the Puerto Rico Climate Change Council. At the time of publishing this report the Council has 157 members and collaborating partners.

World's societies need to increase their knowledge and understanding of climate change, as well as its effects and impacts in order to effectively adapt. Adaptation demands fundamental changes in the ways we produce goods and services, and in our individual lifestyles. These changes can and should provide opportunities for job creation and stimulus to emergent markets. In Puerto Rico, the general public associates climate change and are primarily concerned about the potential impacts of climate change to life and property, and the potential increase in the frequency and magnitude of storms and hurricanes, storm surges, floods, and coastal erosion. The general public is less aware of climate change impacts on human health, food production, water supply, and biodiversity.

The DNER through the Puerto Rico Coastal Zone Management program continues the analysis of current and potential impacts of climate change and sea level rise on coastal communities, infrastructure, ecosystems, habitats, and populations of coastal and marine species. Other partner organizations, as well as researchers from Federal and Commonwealth agencies, universities, non-governmental and community-based organizations represented in the PRCCC also continue investigating, evaluating, assessing, and contributing to develop and catalog the best scientific, technical, and communities' knowledge to support decision making at the public and private sectors and each individual member of our population.

This first Climate Change Vulnerability Assessment report will be followed by the Adaptation Strategies document. Both documents will be periodically updated by the Climate Change Council with the support of the Puerto Rico Coastal Zone Management Program. It is our aspiration that these documents contribute to guide public policy formulation and implementation, coastal areas planning and development, as well as to strengthen public education and awareness about the risks and alternatives to adapt to future climate scenarios.

We are witnessing multiple changes in global processes, not only those that are climate related. We must address these changes in an informed manner, with creativity, innovation, and solidarity.

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