



Ministerial Statement

By

The Hon. Walter Roban, JP, MP

Deputy Premier and Minister of Home Affairs

Friday, 4th March, 2022

" Bermuda and Climate Change: A Study to determine the Impacts from Sea Level Rise and Changing Storm Activity "

Mr. Speaker, I rise today to inform this Honourable House of the launch of a major study to identify the potential impacts and risks of climate change to Bermuda.

Mr. Speaker, you will be aware of statements, made at COP26 and in other international public forums, that recognise that small island states and developing countries, while not the largest contributors to greenhouse emissions, will be disproportionately affected by the impacts of climate change. This fact clearly is true in our small island. Climate change, particularly rising sea levels, poses a significant threat to Bermuda.

Within the next twenty-five years Bermuda is expected to experience extreme weather events. Events that typically used to occur once every one-hundred years are predicted to occur every year. These include more frequent and more intense storms, higher sea levels and tides, and increased and intense but less predictable rainfall. Additionally, Bermuda faces the threat of major changes to its marine ecosystem including our protective coral reefs that encircle the islands, as well as intrusion of salt water into our freshwater lenses which may result in critical reductions in our water supply.

Mr. Speaker, these effects of climate change are a major threat to Bermuda. The sum total of these impacts has the potential to affect our very viability as a country. Our infrastructure, including but not limited to: the airport, the solar farm on the airport finger, public highways, the port infrastructure in Hamilton and St. George, the Dockyard cruise ship terminal, some hotels, as well as energy production and distribution, are under threat. The land we live on, particularly in low-lying areas and even our south shore beaches which are important for our tourism industry are also all under threat.

Mr. Speaker, in the summer of 2021, the Ministry of Home Affairs began consultations with Government House to assist Bermuda to secure funding opportunities from the U.K. Government for environmental initiatives. The Ministry sought a grant to fund a study to assess some of the inherent risks to Bermuda caused by the impacts of climate change. I

am pleased to announce that the U.K. Government has awarded us such a grant for \$200,000, in the first instance, to the year ending 31st March 2022. As a result, the Department of Planning has now engaged Smith Warner International Limited (SWI) to conduct the climate study.

Mr. Speaker, you will be aware that SWI conducted the 2004 report titled: “Coastal Protection and Development Planning Guidelines for Bermuda”. Honourable Members will be aware that the Kroll Bond Rating agency referenced the 2004 report and stated that this was the last report done on the impacts of climate change. It is intended that SWI will undertake an update with an expanded scope to their 2004 report on coastal erosion. The terms of reference will not only be updating the findings of the 2004 report, but will also be undertaking further studies and making recommendations to better understand the impacts of climate change.

Mr. Speaker, the study will make predictions specifically for Bermuda with a projection timeline for best- and worst-case climate change scenarios over short-, medium- and long-term time frames. These include:

- Undertaking a vulnerability assessment for major infrastructure such as the airport, ports, public highways, the electricity generation plant, subterranean utility cabling, the Tyne’s Bay incinerator, and sewage management systems;

- Identifying what effect sea level rise will have on waterways, inshore ponds, and marshes, from an ecological perspective;
- Identifying Government infrastructure and facilities located at or close to the shoreline that are at risk from erosion or inundation;
- Identifying agricultural areas vulnerable to saltwater inundation and to soil salinization, within the context of food security and our continued ability to cultivate fields;
- Updating coastal erosion and flood inundation projections for the offshore islands, bays, beaches, and dunes, especially during storms and hurricanes;
- Understanding the effects that coastal erosion and sea level rise will have on the mean sea level benchmark thereby impacting waterfront properties;
- Identifying coastal areas prone to hydraulic erosion and / or destabilization of the cliff faces for the island shoreline areas;
- Mapping projections for inundation across Bermuda identifying both low-lying coastal areas that will be periodically or permanently inundated by seawater, and low-lying freshwater resources that could be impacted by saltwater intrusion;
- Making recommendations for products / construction methods that are effective in controlling or reducing the effects of erosion. e.g., cliffs, and beach dunes, including “green” or hybrid approaches;

- Identifying ‘no go’ areas for future development based on predicted flood zones and areas susceptible to high erosion; and
- Identifying critical infrastructure components that will be at risk over the near-, medium- and long-term time frames.

Mr. Speaker, this is a wide-ranging study, the first of its scale undertaken by the Bermuda Government. I am pleased to note that the study has already commenced. Representatives of SWI arrived earlier this week on island and have begun meeting with stakeholders and undertaking their research.

Mr. Speaker, the recommendations from this report will assist the Government to plan to address and prioritise measures to mitigate the impacts of climate change. It is also planned to amend the coastal zoning in the Bermuda Plan, after the statutory consultation period, to reflect the data captured and allow landowners to make informed choices about developing land that may be affected by rising sea levels.

Mr. Speaker, the Government also recognizes that a coordinated, strategic approach to climate change is required in order to effectively devise and implement a dynamic over-arching plan for mitigating and adaptation to the effects of climate change in Bermuda. Such an approach would reduce the duplication of effort across ministries and other entities; maximize understanding of various initiatives in Bermuda; and leverage the wealth of knowledge available throughout different sectors.

As such, I am pleased to announce that a Climate Task Force was established last year by the Ministry of Home Affairs. The task force currently comprises representatives from: the Ministry of Home Affairs including the Departments of Energy, Environment and Natural Resources, and Planning; and the Ministries of Public Works; Finance and Transport, which includes the Bermuda Weather Service.

Mr. Speaker, Honourable Members will be aware that the Bermuda Fiscal Responsibility Panel's report for 2021 was published last week. The Panel has welcomed the establishment of the Climate Task Force. Additionally, the panel's report recommended that in terms of climate change, the focus for Bermuda should be on resilience by "reducing Bermuda's vulnerability to extreme weather events, sustainable development, improving coastal and ocean management and leveraging the opportunities offered by Bermuda's natural mangrove and sea grass carbon sinks."

In order to successfully develop this resilience, the panel encouraged the government to "carry out an assessment of the physical, economic and fiscal risks that climate change might pose to the Island, and where necessary invest further in measures to improve its resilience."

I am pleased to note that the work of the Ministry of Home Affairs in establishing the Climate Task Force and in having engaged Smith Warner International to undertake the climate change study demonstrates both the

proactivity of the Government and the alignment of our actions with the report's recommendations.

Mr. Speaker, in closing, I would like to thank Her Excellency Governor Rena Lalgie and her team, in particular, Mrs. Pearl Joseph, Government House Policy Officer, for their efforts to secure funding to help Bermuda identify the risks and prepare for the inevitable effects of climate change on our islands. I would also like to recognise the work of the Climate Task Force, in progressing this initiative, including:

- From the Ministry of Home Affairs, Permanent Secretary Rozy Azhar, Victoria Pereira, Drew Pettit, Jeane Nikolai, David Northcott, and Geoff Smith and his team;
- From the Ministry of Public Works, Permanent Secretary Randy Rochester, Kirk Outerbridge, Steven Conway, Sean Patterson, Austin Kenny, and Tarik Christopher;
- From the Ministry of Transport, Permanent Secretary Jasmin Smith;
- From the Bermuda Weather Service, Mark Guishard; and
- From the Ministry of Finance, Hasan Durham.

I look forward to updating this Honourable House in due course when we receive the results from the study and as we move forward to tackle the important challenges that climate change brings us.

Thank you, **Mr. Speaker**.