

# RIDING THE STORM

## —ARCHAEOLOGICAL HERITAGE AND CLIMATE CHANGE

Michael MacDonagh, Chief Archaeologist at the Department of Culture, Heritage and the Gaeltacht, outlines plans to meet the challenge of climate change impacts on our historic built environment.



On 12 February 2014 Storm Darwin swept over Ireland. This was one of the most extreme weather events ever recorded here. Wind speeds reached 160km/hour, and there was extensive coastal and inland flooding. Electricity supply was cut off to hundreds of thousands of homes, over seven million trees were blown down and lives were lost.

In 2014 the National Monuments Service received 206 reports of damage to monuments or historic buildings—up fivefold from the previous year. Almost half of these reports (94) related to impacts arising from erosion and weathering, over six times the average yearly total for this category. The majority of reports came from the west and south-west coasts, with most from County Galway, though the midlands were also

widely affected. The reports received were of impacts on known burial grounds, with ancient human remains being exposed through wave action and coastal erosion; of ancient coastal middens being exposed and damaged; of collapsed masonry remains; and also of previously unknown archaeological remains being exposed.

While our historic buildings and archaeological sites and monuments across the State have stood for centuries, if not millennia, there can be no denying the impact of extreme weather events and climate change. Storm Darwin was one of a number of storm events through 2014, and the trend of extreme weather events, increased rainfall and even drought is growing. In 2017 Storm Gert caused significant damage, notably in Donegal.

Studies of the climate record in Ireland show an upward trend in temperatures, resulting in warmer wetter winters and hotter drier summers, accompanied by an increase in extreme events, a pattern that is set to continue. In the marine environment we can expect rising sea levels and an increase in storm surge.

### Making a plan

In 2015 the *Climate Action and Low Carbon Development Act* established the requirement for a National Adaptation Framework (NAF). The framework, which is to be completed in the coming months, aims at reducing

Above: Fig. 1—Exposed skeletal remains at Omey Island, Co. Galway (National Monuments Service, 2015).