

Scots homes and roads at risk from rising sea

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Residents of Argyll and Bute are the most likely to have their property fall victim to coastal erosion ALAMY

More than 3,000 homes and 100 miles of road and railway near Scotland's coast will be swallowed by the sea within a few decades, a study warns.

Glasgow University academics predict that almost £4bn worth of infrastructure could be damaged by coastal erosion. Argyll and Bute tops a table of at-risk council areas.

The findings have prompted calls for a plan to tackle or mitigate erosion along more than 2,400 miles of coast and to help people who face losing their homes and businesses.

The wealthiest members of Scottish society will be largely immune from the threat while the poorest will be most at risk, according to the study.

“Natural hazards and climate change are set to impact most on the vulnerable,” said Dr James Fitton, from the university's School of Geographical & Earth Sciences. *“It is therefore imperative that we begin to plan, manage, and support both people and the environment in a manner that is socially just and sustainable.”*

The study used geological surveys to produce an “erodibility” map. This was combined with socio-economic data to identify which groups were more, or less, resilient to coastal erosion. Those in more affluent groups, such as those classified as captains of industry and “new

suburbanites” are least threatened by erosion, while those termed “mid-rise breadline”, “rustbelt renaissance” and “agrarian heartlands” are among the most vulnerable.

About 3,300 homes with a combined value of £524m were found to be at high risk of erosion. Of these, 1,273 were occupied by people with “very high vulnerability”, said Fitton, and would suffer disproportionately if homes were lost.

In Argyll and Bute, 286 homes are considered at high risk. In the Highland council region, 255 dwellings have been identified as vulnerable and in Dumfries and Galloway, 205.

About 110 miles of road and 8 miles of rail track are also in danger.

In total, the study calculates that assets worth £1.8–£3.7bn could be lost by 2050, a figure that does not include other costs such as rehoming victims and providing healthcare.

“Depression and other mental disorders are commonly reported consequences of flooding and similar effects are likely to be associated with the stresses associated with loss from coastal erosion, although the impact of coastal erosion on health and wellbeing is poorly documented”, it states.

Dr Jim Hansom, a co-author of the study, said: *“Both people and assets will be increasingly impacted and we urgently need to develop adaptation plans to cope with what is expected to occur. We need to think beyond simply armouring the coastline because, in many cases, this has been proven to be an ineffective and poor use of resources.”*

The research supports the Scottish government’s Dynamic Coast project, which has examined the impact of coastal erosion. It predicts where erosion is likely, where defences may be needed and where enhancing natural defences could protect homes and businesses.

Since the 1970s, the average rate of erosion has doubled to one metre per year.

About 78% of Scotland’s coastline is dominated by hard rock and sediments that are largely resilient to coastal erosion and about 20% is “soft”, populated with sandy beaches and dunes that whilst subject to erosion, still provide invaluable protection.

Links golf courses are particularly under threat. They include Royal Troon, Carnoustie Golf Links and Montrose Golf Links, where the North Sea has encroached 70 metres since the late 1980s. The club, which celebrated its 450th year in 2012, has seen its two 18-hole links gradually move inland. Board members have described the situation as “critical” and urged the Scottish government to prioritise Montrose in the next batch of funding for erosion protection, due in 2022.

Coastal erosion ‘will hit poor hardest’

Ian Marland

February 12 2018, 12:01am, The Times



There have been calls to mitigate the erosion of Scotland’s coastline and protect those who live and work along it.

NICOLAS ASFOURI/AFP/GETTY

More than 3,000 homes and 100 miles of road along Scotland’s coast will be swallowed by the sea within decades, a study has warned.

Academics from Glasgow University have predicted that almost £4 billion worth of infrastructure could be damaged by erosion. Argyll and Bute is the area most at risk.

The findings, revealed in *The Sunday Times*, prompted calls for a plan to mitigate erosion and help people who face losing their homes. The wealthiest Scots will be largely immune from the threat while the poorest will suffer the most.

“Natural hazards and climate change are set to impact most on the vulnerable,” James Fitton, of the university, said. “It is therefore imperative that we begin to plan, manage and support both people and the environment in a manner that is socially just and sustainable.”