

Dynamic Coast has shown that erosion rates are increasing, presenting clear risks to a significant proportion of Scotland's coastal assets. Within Highland main road and rail routes are at risk, along with other coastal assets. The combined threats of coastal flooding and coastal erosion have increased in recent decades and are expected to worsen with climate change. Planning and action is needed now to increase resilience and business continuity. Dynamic Coast allows clubs to better appreciate increasing risks and to plan and act now to increase resilience.

The Highland coast

- Highland Council Local Authority area contains 1/3 Scotland's soft coast within its area and contains the longest length of erodible shores in Scotland.
- Highland Council has 5,500km of shoreline, three-quarters is hard and mixed (~4,100km), 77 km or 2% is artificial, and 1,300km or 23% is soft (erodible).
- Highland's 1,300 km of beaches, dunes and saltmarshes are varied, with large, continuous beaches in the east, smaller pocket beaches in the north and west.
- These beaches, dunes and saltmarshes protect vital infrastructure, businesses and heritage assets.
- Climate change is increasing the risks to coastal assets.

Changes since the 1970s

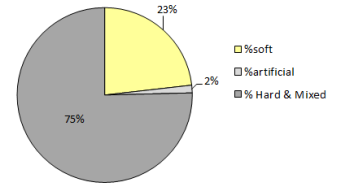
- 79% of the Highland soft coast has remained stable since the 1970s, but 152 km has experienced erosion (12% same as national average) and 110 km (9%) has experienced accretion (below national average).
- In Highland more than 30m of erosion has occurred on 73 km of shore (higher than the national average).
- Nationally there's been an increase in the extent & rate of erosion since the 1970s.

Vulnerability Assessment

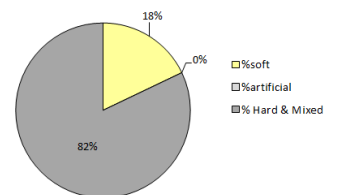
If recent erosion continues over next 30 years the following assets are at risk eg.:

	Residential property	Non-Res. property	Septic Water	Roads	Roads	Clean water network	Clean water network	Rail	Rail	Cultural heritage	Natural heritage
unit	#	#	#	#	m	#	m	#	m	#	#
At risk	-	1	-	8	229	3	322	3	1,478	3	21
Adjacent	20	8	8	17	2,600	9	1,936	4	1,229	-	-
e.g.		Kylesterra, Kilmuir	Loch Eil, Durness	A9 Evanton, Kyle of Durness, Kinlochbervie, Beaulieu Firth,		Beaulieu Firth, Sandwick, Loch Eil		Loch Eil & Beaulieu Firth		Dunrobin Gardens	Morrish More & Loch Fleet

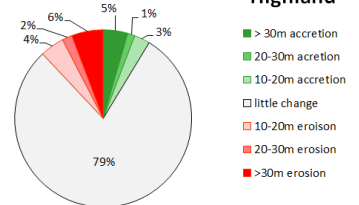
Highland



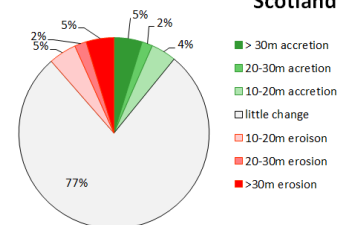
Scotland



Highland



Scotland



A window of opportunity and next steps?

- Future impact is likely to be worse than recent past; we have a window of opportunity to plan now.
- Highland Council currently has no Shoreline Management Plan (SMP), whilst other LAs are using Dynamic Coast to support SMP's. Erosion and [SEPA's Flood data](#) should be considered together.
- Collaboration exists between Dynamic Coast & Highland Council at Golspie.
- Coastal management should be based on Coastal Cells, not LA boundaries. Further information including cell and site reports please visit DynamicCoast.com

