

Scotland's water industry provides 2.54 million households and 152,000 business properties with clean water and waste water treatment. The combined threats of coastal flooding and coastal erosion to have increased over recent decades and are expected to worsen with climate change. Planning and action is needed now to reduce the impact on Scotland's water infrastructure. Dynamic Coast provides the evidence base and advice to inform the Scottish Government and local authorities on the pace of coastal change and allow adaptation and increased resilience.

Who will this impact?

- Within 50m of MHWS, **29% of wastewater treatment and network assets** lie behind **unprotected soft coast**, and **25%** lie behind protected **artificial coast**¹.
- By length within 50m of MHWS, **29% of gravity pipes** and **35% of rising mains** lie behind **unprotected soft coast**, and **27%** and **22%** lie behind **artificial coast** protected by engineered structures¹.
- **395 wastewater treatment and network assets**, **27 km of gravity pipes** and **17 km of rising mains** are at risk of erosion by 2050 under the highest sea level rise and "do nothing" management scenarios².
- **Climate change is increasing the risks to the operation and integrity of Scotland's wastewater infrastructure.**

How can Dynamic Coast help you?

- Dynamic Coast provides detailed interactive [maps](#) of how your coastline has changed over the last 100 years and informs how this would affect coastal wastewater infrastructure if current erosion continues up to 2100.
- Of the 268 wastewater treatment assets at risk of erosion by 2050, 52 are outfalls and 216 are treatment works.
- Of the 127 wastewater network assets at risk of erosion by 2050, 95 are pumping stations.
- Highland is the Local Authority with the most wastewater assets at risk of erosion (462 assets), followed by North Ayrshire (273 assets).
- Dynamic Coast has identified the locations and pace of coastal erosion and its impact on our wastewater network and treatment asset base, allowing both local and regional action to be taken to reduce the risk of further erosion and flooding.

What can you do to improve future resilience?

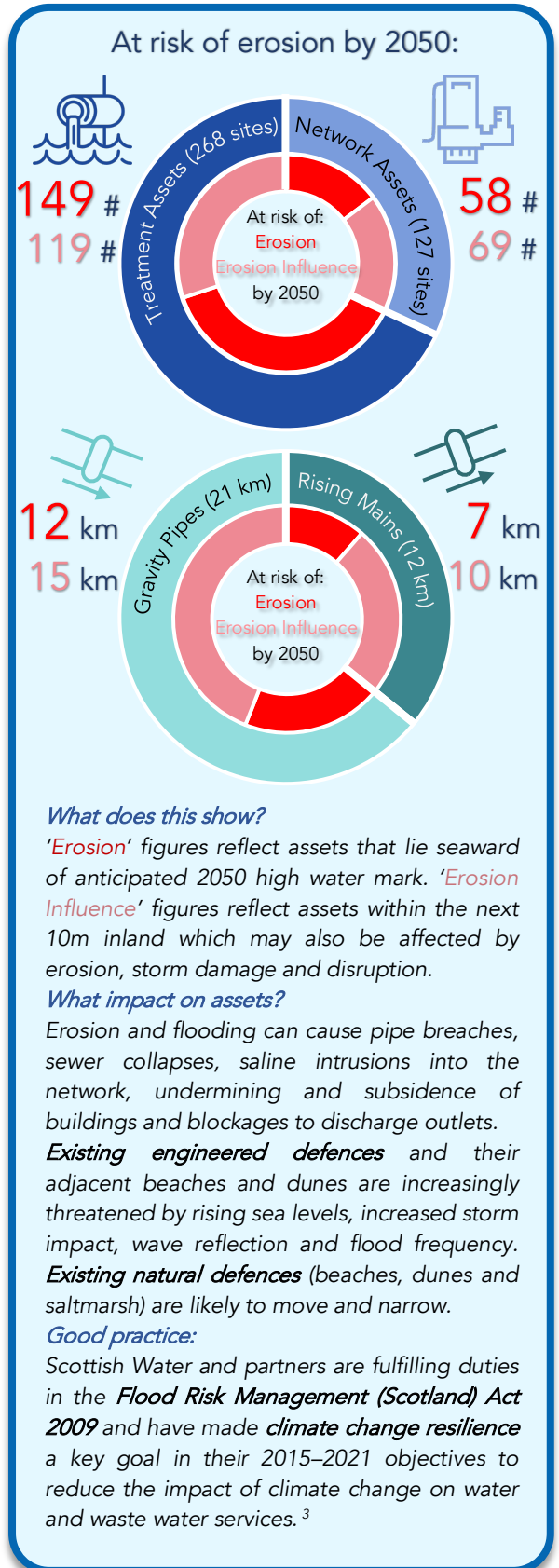
- ✓ To understand how your coast has changed and may change in the future – [view erosion maps here](#) and SEPA's [flood maps here](#).
- ✓ Take stock of how assets may be impacted with a rising sea level and increased erosion and storm intensity.
- ✓ Early adaptation has the potential to greatly reduce future costs.

A window of opportunity

- The science is clear, we have a window of opportunity to put in place plans to improve the resilience of our wastewater network before coastal erosion and flooding worsens.
- Scottish Water and partners are using [DynamicCoast.com](#) to inform plans and Building With Nature to increase their coastal asset resilience and protect customers.

Find out more at:

[DynamicCoast.com](#), [SEPA](#), [Scottish Water](#)



1 Dynamic Coast (2021) National Risk Assessment & Fitton, J.M. (2015) A national coastal erosion risk assessment for Scotland. PhD thesis, University of Glasgow

2 Met Office (2019) UK Climate Predictions 2018 Science Overview – Executive Summary. Online report

3 Scottish Water (2018) Annual Report & Accounts 2018/19. Online report