

NATIONAL NETWORK OF REGIONAL **COASTAL MONITORING** PROGRAMMES

How strategic coastal monitoring provides underpinning evidence for flood and coastal erosion risk management (FCERM) decision making.



The risks of coastal flooding and erosion are increasing, and investment in coastal protection is likely to increase. The decision making processes required to manage these increasing risks relies on a **robust evidence base of coastal processes, and predictions of coastal change.**

Strategic coastal monitoring provides the best balance of targeted, consistent, reliable and openly available coastal data, collected efficiently and providing value for money.

KEY FACTS — STRATEGIC COASTAL MONITORING



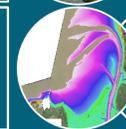
TARGETED: 5,670 km of English coastline monitored based on risk



INFORMED: Partnered with the Environmental Agency, Risk Management Authorities, Coastal Groups, RFCCs and more



STANDARDISED: National consistency in monitoring ensures a quality, robust evidence base



EFFICIENT: A co-ordinated, co-operative approach working towards national goals



AVAILABLE: Data disseminated under Open Government License, free for all users from www.coastalmonitoring.org

What is the Risk?

In England 520,000 properties are at risk of coastal flooding, and 8,900 from coastal erosion. Damages are approximately £260,000,000 per year. Climate change is **increasing risks** and the potential cost, and by 2080 property numbers at risk may more than triple¹. This doesn't consider the additional risks to coastal infrastructure.

How is the Risk Mitigated?

The Environment Agency has invested £1.4 billion over a 6 year period into projects designed to mitigate coastal erosion and flood risk. This investment is likely to increase by £100 –200 million annually over the next 50 years. Coastal change and risk management are ongoing and long-term, and management and defence decisions need to be based on **strong evidence** of the drivers, mechanisms and response of coastal change.

What Evidence is Needed?

To understand coastal processes at work we need to know:

What **drives** coastal change?

How does coastal change happen?

What is the **response** of the coasts?

There are complex, ongoing feedbacks between these elements, and they are all constantly changing. Predicting how they might change in the future is an ongoing challenge.

As such, the evidence needed to understand them, needs to be continually updated, in the form of **coastal monitoring.**

The National Network of Coastal Monitoring Programmes of England

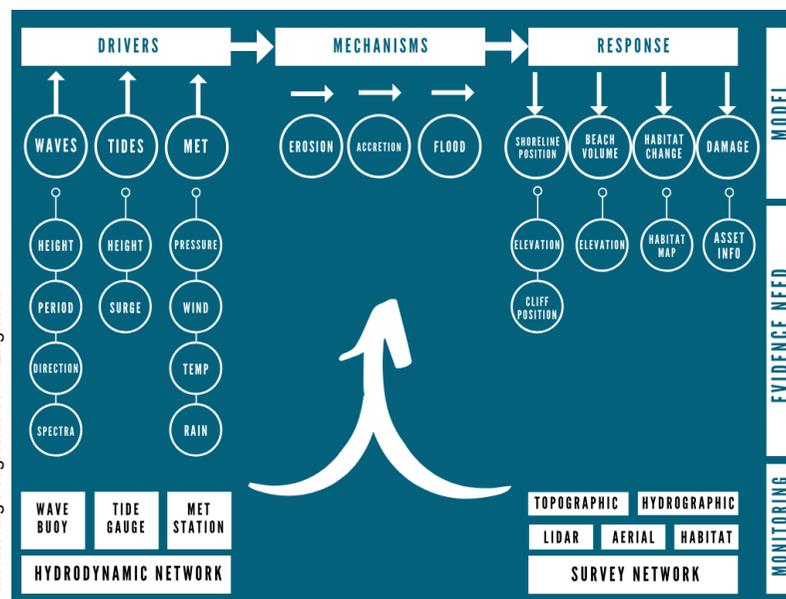
A network of regional programmes that collect and disseminate data on coastal change, on behalf of the Coastal Group network, provides the evidence needed to support coastal risk management.

Working closely with Local Authorities, the Environment Agency and the Coastal Groups, the programme ensures that the data is:

- Targeted
- Informed
- Standardised
- Efficient
- Available

Coastal change data benefits not only flood and coastal erosion risk management, but also wider coastal management, coastal research, and coastal visitors and users. All of the data collected by the programme, and any reports and analysis are freely available under open government license at: www.coastalmonitoring.org

A process based model of the evidence needed to understand coastal change, and how it is collected by the National Network of Coastal Monitoring Programmes of England.



1. Committee on Climate Change, 2018. Managing the coast in a changing climate.

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