THE STORY OF SWEEP

The South West Partnership for Environmental and Economic Prosperity – SWEEP – used multidisciplinary research, expertise and evidence to place the environment at the heart of policy and business decisionmaking. This delivered economic and social benefits to South West England and beyond, whilst protecting and enhancing the region's abundant natural resources.

SWEEP IN NUMBERS



THE SWEEP PRINCIPLES SWEEP LEGACY

Natural Capital Approach: taking into account the value of the natural environment for people and the economy.

Whole-systems thinking: recognising the need to work at larger spatial scales, across landscapes, river catchments, coastal zones and seascapes.

3 Specialist impact teams: connecting academic experts with research users to accelerate the translation and co-creation of knowledge.

Place-based approach: establishing the South West as an exemplar, nationally and internationally, for Natural Capital-led economic growth, social gains and environmental improvements.

University

of Exeter

WIVERSITY OF PML

A library of open-access tools and resources are extending SWEEP's impact far beyond the South West, from Yorkshire and South Wales to South Africa and Australia.



Image credit: Illustrative Science 2022

Laboratory

Plymouth Marine



IMPACT HIGHLIGHTS

Valuing the marine environment SWEEP outputs underpinned the world's first Marine Natural Capital Plan within the North Devon Biosphere Reserve (a UNESCO World Heritage Site), shaped new fisheries management plans for five threatened, commercially important species, and underpinned a trawling byelaw to protect 304km² of coastal seabed for the restoration of kelp forest.

Managing coastal change

Producing more accurate, site-specific coastal hazard forecasts, SWEEP's Operational Wave and Water Level (OWWL) model influenced an attitudinal shift at the Environment Agency around the importance of having a wave overtopping tool as part of their national forecasting strategy. The model also helped Bombora Wave Power prevent damage to its \$20M Wave Energy Converter.

Restoring terrestrial ecosystems

SWEEP worked with the Dartmoor National Park Authority, the North Devon Biosphere Reserve and the Forestry Commission to create bespoke mapping tools that use satellite data to detect changes to woodland, hedgerow, moorland and other key habitats over time. The tools are delivering savings to partners of at least \$750K over five years and are expected to play a key role in enabling North Devon to realise c.\$40M in natural capital benefits and safeguard or create c.700 jobs by 2030.

'Whole catchment' water quality

SWEEP's 'whole catchment' approach to water management for South West Water helped secure £15M in new funding from regulator Ofwat, is helping to reduce the company's operation costs whilst delivering improvements in biodiversity and water quality, and secured its business plan 'fast-track' status, worth £200M.

Connecting people with nature

SWEEP co-created 12 innovative evidence-based nature and health resources, and strengthened regional and national policy including; Cornwall Council's Social Prescribing Strategy, Dorset Local Enterprise Partnership's strategic policy development, and the Wildfowl & Wetlands Trust's contribution to Somerset's new 6,140 hectare 'super' National Nature Reserve.

SWEEP was a partnership between the University of Exeter, the University of Plymouth and Plymouth Marine Laboratory. It was funded between 2017 and 2023 by UKRI (\$5m), as part of NERC's Regional Impact from Science of the Environment Programme. SWEEP also benefitted from \$7.3m in partner match funding. Contact: sweep@exeter.ac.uk

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Natural Environment Research Council