

# Spotlight on economic and social research in the marine environment

## Socio-economic data for planning marine protected areas ([MB0106](#))

Marine Conservation Zones (MCZs) are being planned under the Marine and Coastal Access Act 2009 as part of a network of marine protected areas. Socio-economic factors may be considered in selecting Marine Conservation Zones and management measures need to take account of human activities in each MCZ. So for both designation and management we need to know the location of human activities and the pressures they generate, for example on the seabed.

This project and associated project [ME1420](#) have provided mapped data on socio-economic activities on the UK Continental Shelf, including oil and gas locations; renewable energy projects; fishing activity; mariculture sites (aquaculture and shellfish); and archaeological sites (including the location of wrecks). There is also information on licensing and ownership of the datasets related to these activities. See Figure 1.

To prepare the first ever map of national inshore fisheries data (see Figure 2), the Centre for Environment, Fisheries and Aquaculture Science (Cefas) used observational data of the inshore fleet from Sea Fisheries Committees in England and Wales and the Marine Management Organisation. Cefas then integrated the inshore data with offshore fishing activity data collected by continuous satellite recording to map all fishing activity.

Cefas assessed how different activities affect the marine environment by grouping physical pressures into categories such as physical loss (smothering, obstruction and removal) and physical damage. The mapped data on physical pressures will help identify areas where socio-economic activities interact with conservation features, following categories in the EU Marine Strategy Framework Directive.

The mapped data were made available to the Regional Marine Conservation Zone Projects and helped to inform their site recommendations by identifying areas of greatest sensitivity to human pressures. Information on the pressures associated with different human activities will be important for setting the management measures for the MCZs to achieve the necessary level of protection to meet the conservation objectives. The mapped data are also being used for marine planning; and the Geographical Information System (GIS) toolbox developed by Cefas allows future data analysis by Inshore Fisheries and Conservation Authorities.

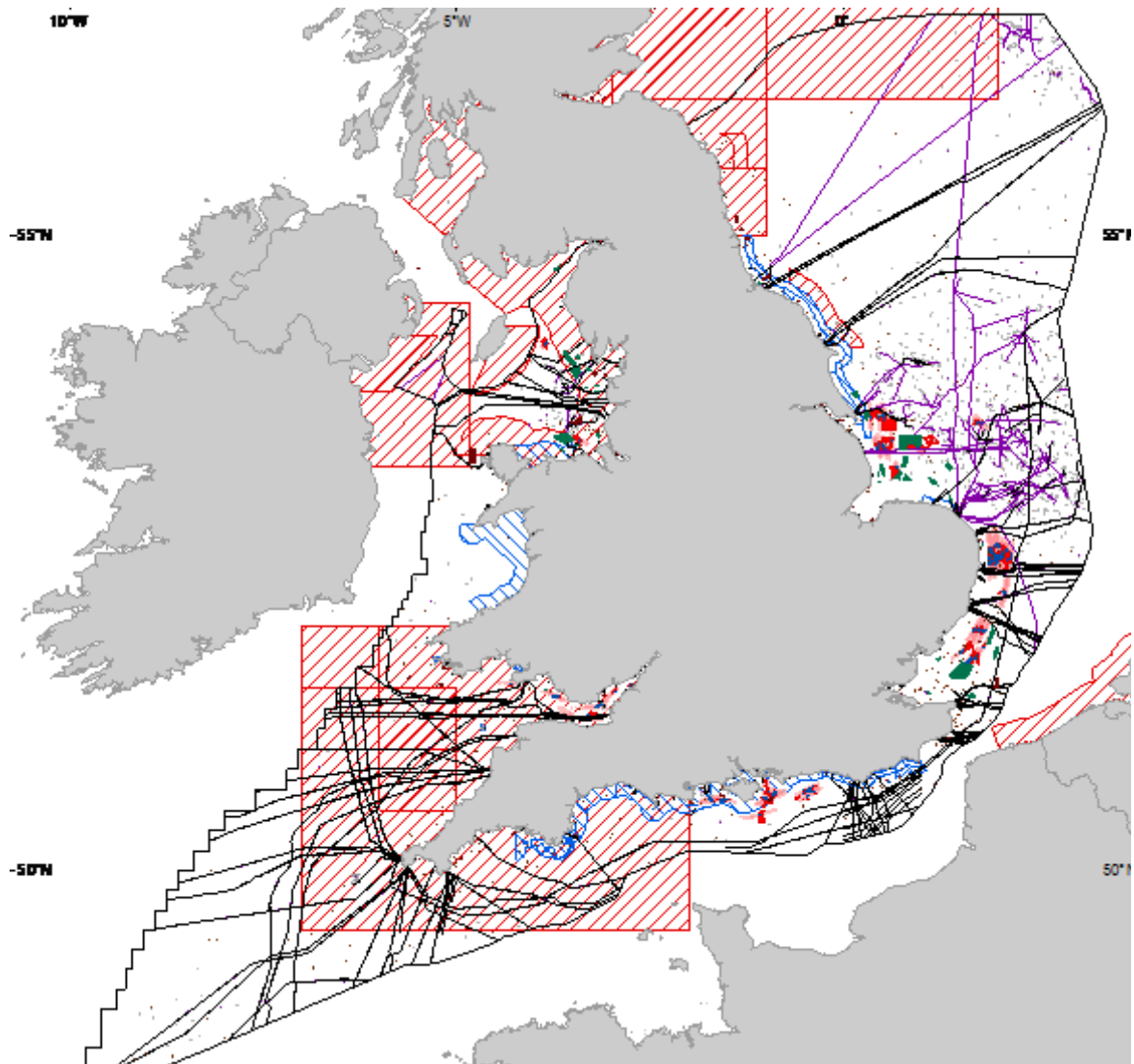


Figure 1: Human activities such as platforms, cables, pipelines, well heads, wind turbines, and wrecks causing obstruction of the seabed (Source: Cefas).

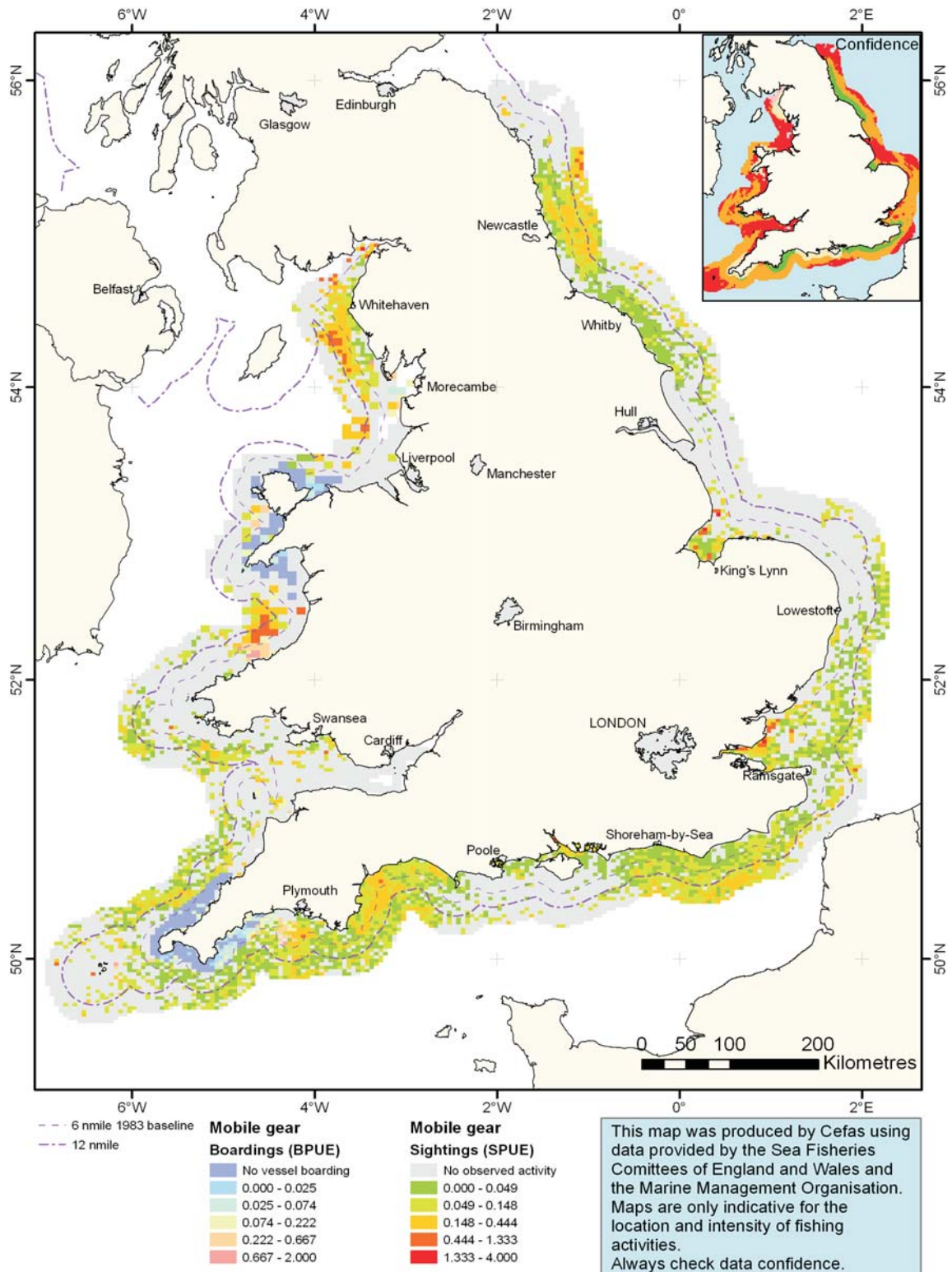


Figure 2: Example of National Inshore Fisheries mapped data, showing the location of the highest intensity of fishing activity in inshore waters, mainly by vessels under 15 metres in length. (Source: Cefas)