



National Environmental  
Research Program

**MARINE BIODIVERSITY** *hub*

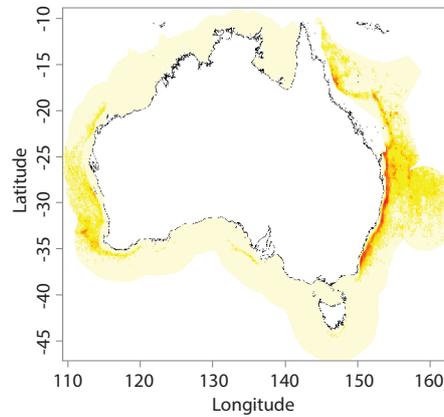
## Assessing the impact of multiple, cumulative, pressures

Australia's marine territory is affected by many different pressures. Their collective impacts are complex to understand and predict, yet central to the management of marine activities and biodiversity conservation.

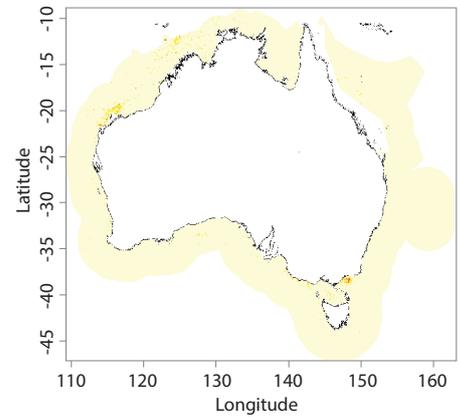
Assessing the impact of multiple, cumulative, pressures on the marine environment traditionally has involved canvassing expert opinion that can be variable and contradictory. In contrast, this three-year project is taking a quantitative approach to let the data speak for themselves. Statistical tools are being used to analyse existing datasets (fishery, shipping, oil and gas and conservation databases) for their effects on environmental assets nominated by SEWPaC.

The analysis will generate multi-layered layered 'pressure maps' for selected regions that identify high pressure areas, such as where multiple activities interact. The pressures include fishing, oil and gas exploration, undersea pipelines, recreational and military activities, shipping and temperature variation. The analyses and maps will be publically available on the Australian Ocean Data Network.

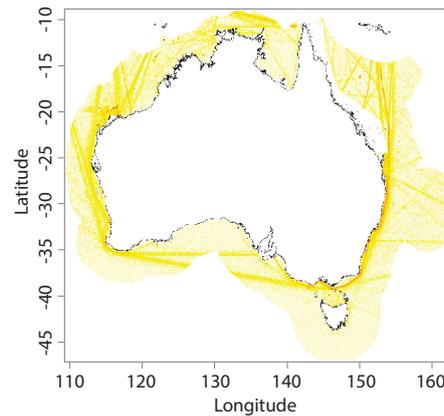
**Longline fishing**



**Oil wells**



**Shipping routes**



**Intensity of activity for longline commercial fishing, shipping and oil and gas wells. The activities overlap in some locations, but are distinct in others.**



Piers Dunstan  
CSIRO  
Piers.Dunstan@csiro.au



Australian Government

Department of Sustainability, Environment,  
Water, Population and Communities



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OF MARINE SCIENCE



### Further information:

**Director NERP Marine  
Biodiversity Hub**

Prof Nic J Bax  
T +61 3 6232 5341  
E Nic.Bax@csiro.au



The NERP Marine Biodiversity Hub is supported through funding from the Australian Government's National Environmental Research Program, administered by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC). Our goal is to support marine stakeholders in evidence-based decision making for marine biodiversity management. Stakeholders include DSEWPaC, the Australian Fisheries Management Authority (AFMA), the Australian Petroleum Production and Exploration Association (APPEA) and the Integrated Marine Observing System (IMOS). (February 2013)