

# Marine sectors urged to work together to better protect marine environment

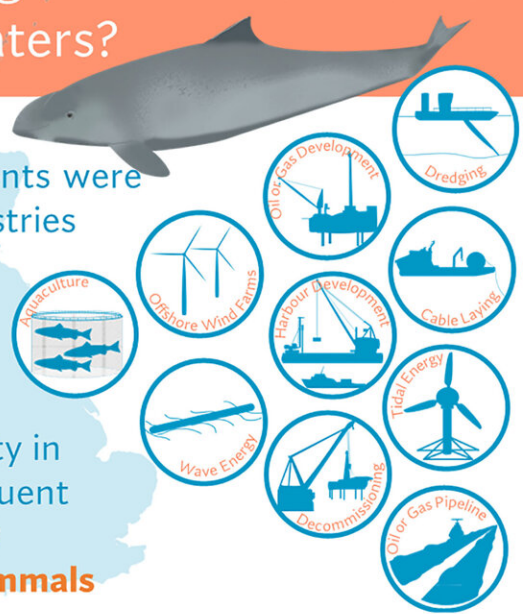
April 1 2022

How are we currently assessing **cumulative effects** for **marine mammals** in UK waters?

**Methods:** 93 Cumulative Effects Assessments were reviewed across a variety of maritime industries

**Key findings:** Assessment standards are not uniform, with significant disparity between industries

**Take home message:** The lack of uniformity in assessment practice, and therefore subsequent mitigation of cumulative effects, may have **conservation implications for marine mammals**



Hague et al. (2022) Same space, different standards: a review of cumulative effects assessment practice for marine mammals *Frontiers in Marine Science*  
DOI 10.3389/fmars.2022.822467



Graphical abstract. Credit: *Frontiers in Marine Science* (2022). DOI: 10.3389/fmars.2022.822467

Marine industries are being urged to learn from one another to better protect marine life and their environments.

That is one of the findings from new research that has explored how marine industries assess their potential for cumulative impacts on [mammal species](#) such as whales, dolphins and seals in UK waters.

In a paper published today in the journal, *Frontiers in Marine Science*, a multi-disciplinary team led by scientists at Heriot-Watt University, explored how cumulative impacts to marine life are currently being considered for 11 industries including [offshore wind farms](#), oil and gas decommissioning, dredging and harbor development.

Of the industries included in the review, 75% of assessments were scored as "weak" or "very weak" when assessing the potential cumulative impact of their activity, with just 4% of assessments considered to be "very strong."

The paper found construction noise was the most common stressor to be considered within assessments, included in 45% of the documents reviewed, whilst vessel noise was included in 29%.

Emily Hague is a marine mammal scientist and Ph.D. researcher from the Centre for Marine Biodiversity and Biotechnology, Institute of Life and Earth Sciences at Heriot-Watt University. She is the lead author of the review and identifies an inconsistent approach taken by industries to implement existing legislation as a major obstacle.

"Our research found that each industry assesses the cumulative stressors in different ways," she explains. "Some are using models, collecting their own data, and utilizing the latest and best available science to potentially more accurately assess their impact, whereas for others the assessments do not make it clear how, or if, they are assessing their potential cumulative impacts.

"This is worrying, as an inconsistent approach may mean that some

industries are better protecting marine mammals from the potential negative effects of their activities than others."

Most industries that operate in UK waters must first complete a Cumulative Effects Assessment (CEA) that identifies, predicts and evaluates the impact of their work on marine life. These assessments are usually completed as part of an Environmental Impact Assessment (EIA), which is one of the main tools utilized by regulatory agencies to ensure the environment and sea life are adequately protected.

However, there tends to be a siloed sector-by-sector approach to these assessments, and so over time practice has become very different between industries. To help counter this, researchers are urging industries to work together to standardize how the [marine environment](#) is considered, to ultimately ensure it is being properly conserved and protected.

Emily continues: "Our research shows a clear disparity in the way cumulative effects are being considered across the same marine space, with considerable discrepancies in the efficacy of CEAs across maritime industries, with many showing no signs of improvement over the study period, namely: aquaculture, harbor development, decommissioning and oil or gas field development.

"Our recommendation is to standardize practice, to ultimately ensure that marine mammals are being adequately protected from cumulative impacts.

"Long-term sustainability of the marine environment can only be achieved if all industries work to the same standards in terms of protecting the environment from significant harm.

"What we are calling for is a commitment from all industries and their

associated regulators to review their current working practices and discuss how the assessments can be standardized across all the industries that are in the marine environment. Some industries are doing better than others, so can serve as knowledge providers to assist those other industries in improving their practice."

Oceans cover about 70% of the earth and support an incredible variety of life. However, [according to the UN](#), as much as 40% of the world oceans are heavily affected by human activities. Stressors placed on [marine life](#) arising from human activities include pollution, noise, net entanglement and vessel strike. All of these factors can have profound potential impact on mammals, including disruption of feeding and rest, or ability to find a mate and socialize.

**More information:** Emily L. Hague et al, Same Space, Different Standards: A Review of Cumulative Effects Assessment Practice for Marine Mammals, *Frontiers in Marine Science* (2022). [DOI: 10.3389/fmars.2022.822467](#)

Provided by Heriot-Watt University

Citation: Marine sectors urged to work together to better protect marine environment (2022, April 1) retrieved 26 June 2024 from <https://phys.org/news/2022-04-marine-sectors-urged-environment.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.