Thanks to all the Speakers

Evie (Evangeline) Wilby from the MMO – Underwater Noise Mitigation

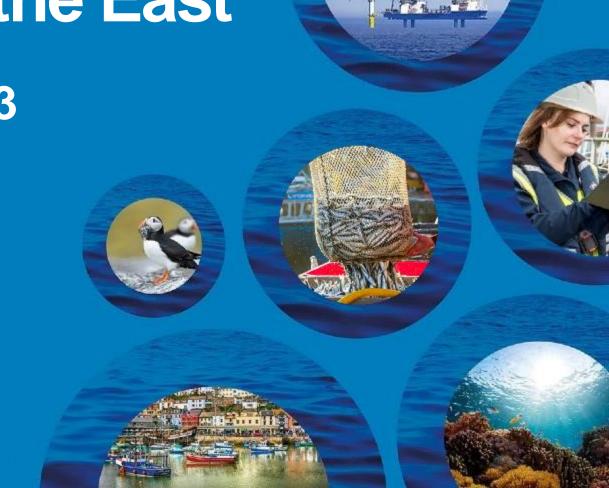
Much more Challenging than usual
Drawing together information from colleagues and
putting this across



Underwater Noise in the East

Key events and change in 2023 (and a forward look to 2024)

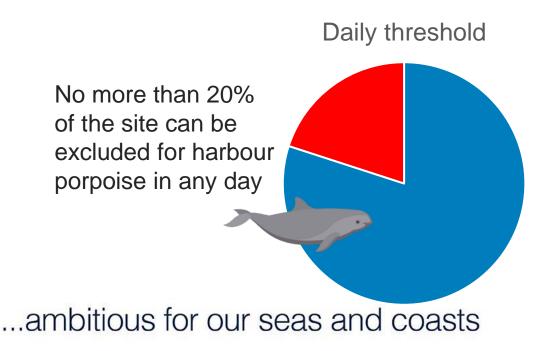
March 2024

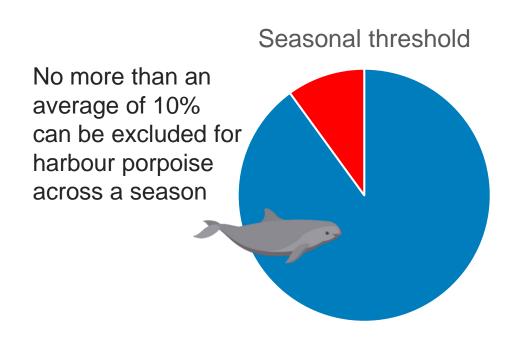




Marine Marine Southern North Sea Special Area of Conservation (SNS-SAC)

- Protected for harbour porpoise highly impacted by noise
- High concentration of offshore wind
- Noisy activities include piling and unexploded ordnance (UXOs)
- JNCC set noise thresholds in 2020 for the area conflicts occur that may breach these thresholds and must be managed accordingly





Offshore Wind Harmful Impacts: EASTME v SWME

A major difference between the south-west and east MMO regions is that there are substantial numbers of offshore wind farms in the EAST.

There is no offshore wind in the south-west - but floating wind is coming.

This was another key reason for choosing the EAST Region to test the SWME Model

Four of the EASTME Communities of Practice (CoPs) have touched upon the *harmful impact* of offshore wind with specific questions and discussion

- Seabed and seashore
- Marine and coastal birds
- Seals
- Cetaceans

Fish & Fisheries – Not raised.

There was NO

Published evidence

In 2023

from the EASTME Region

of Harmful impacts

From Offshore wind on the seabed, fish, birds or mammals

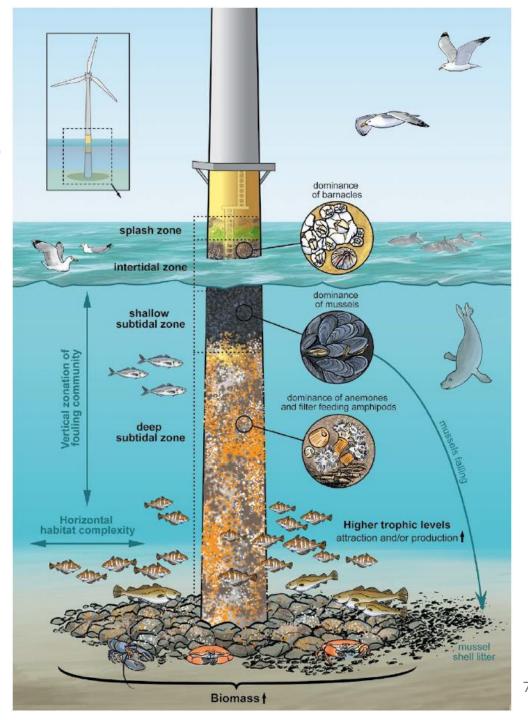
Beyond what we already know ... i.e. installation causes disturbance to seals and cetaceans or rock armour attracts sessile marine life or offshore wind farm site exclude mobile fishing

Offshore wind: Seabed

- Soft sediment to hard complex habitats & biotopes 2% seabed change*
- Habitat change YES Is this harmful?
- OWF Attracts native sessile epifauna & floral organisms (e.g. algae, mussels, barnacles, anemones, etc) and mobile species e.g. crabs, lobsters, fish

Attract fish species – artificial reef – commercial & other – foraging species

- Increased species biodiversity (artificial reef) = Biodiversity – Net Gain
- Seabed trawling ceases within OW Sites => deeper benthic communities recover
- Lots of ongoing research = published?



Offshore wind: Fish & Fisheries - Impacts

- Monopiles and armour act as artificial reefs which attract fish and crustacean species – artificial reefs
- e.g. Ph.D on lobsters & crabs +ve Benefit

 Exclusion of fisheries from Offshore wind sites in the UK, the reality not policy.



Offshore Wind & Coastal & Marine Birds No published Evidence of *harmful* impact on birds in 2023 Context

Context - Oil pollution - Annual beached bird survey
Dead birds float: - beach strandings

Context – Mortality caused by Avian flu – very clear large numbers of dead birds in 2022 Dead birds float: – beach strandings

Context: UK Dogger Bank closed to sand eel fishing –Massive ecosystem benefit 2024







Offshore Wind: Seals
Clear Impact of construction disturbance
No published Evidence of harmful impact of operational OWF in 2023? Ever?

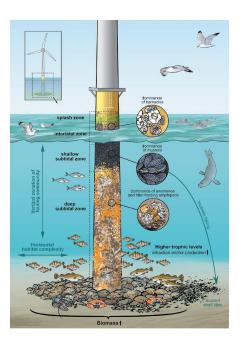
Context:
Habituation to built
Sites e.g. Scroby Sands

Context: Scale of seal pup mortality clear from storm damage

Context: Foraging for fish around monopiles







Harmful impacts of Offshore Wind – How Will We Ever Know?

There is the concern of cumulative effects of a growing number of offshore wind sites

There are lots of 'surveys' => more or less commercially confidential, in data stores. Nobody seems to interrogate

Post-installation monitoring? More or less commercially confidential, in data stores. Nobody seems to interrogate

Strandings

Cetaceans Strandings Investigate YES .. But the annual reports come out late – latest 2019 https://www.zsl.org/what-we-do/projects/cetacean-strandings-investigation-programme-csip

A NEED – A GAP in comparison with the South West where Cornwall Wildlife Trust run an Annual strandings scheme – for Cetaceans (Input into CSIP) – but which also includes seals, birds, and invert 'wrecks'

Programme Manager for CSIP (Cetacean Strandings Investigation Programme) is Rob Deaville Rob.Deaville@ioz.ac.uk It covers England and Wales now. See https://randd.defra.gov.uk/ProjectDetails?ProjectId=20759

The last published annual report is from 2019 as far as I know. Others have been done but not yet published / signed off through Defra.