



Wave Dragon UK EIA / Consent Process and Results

Iain Russell

Wave Dragon UK

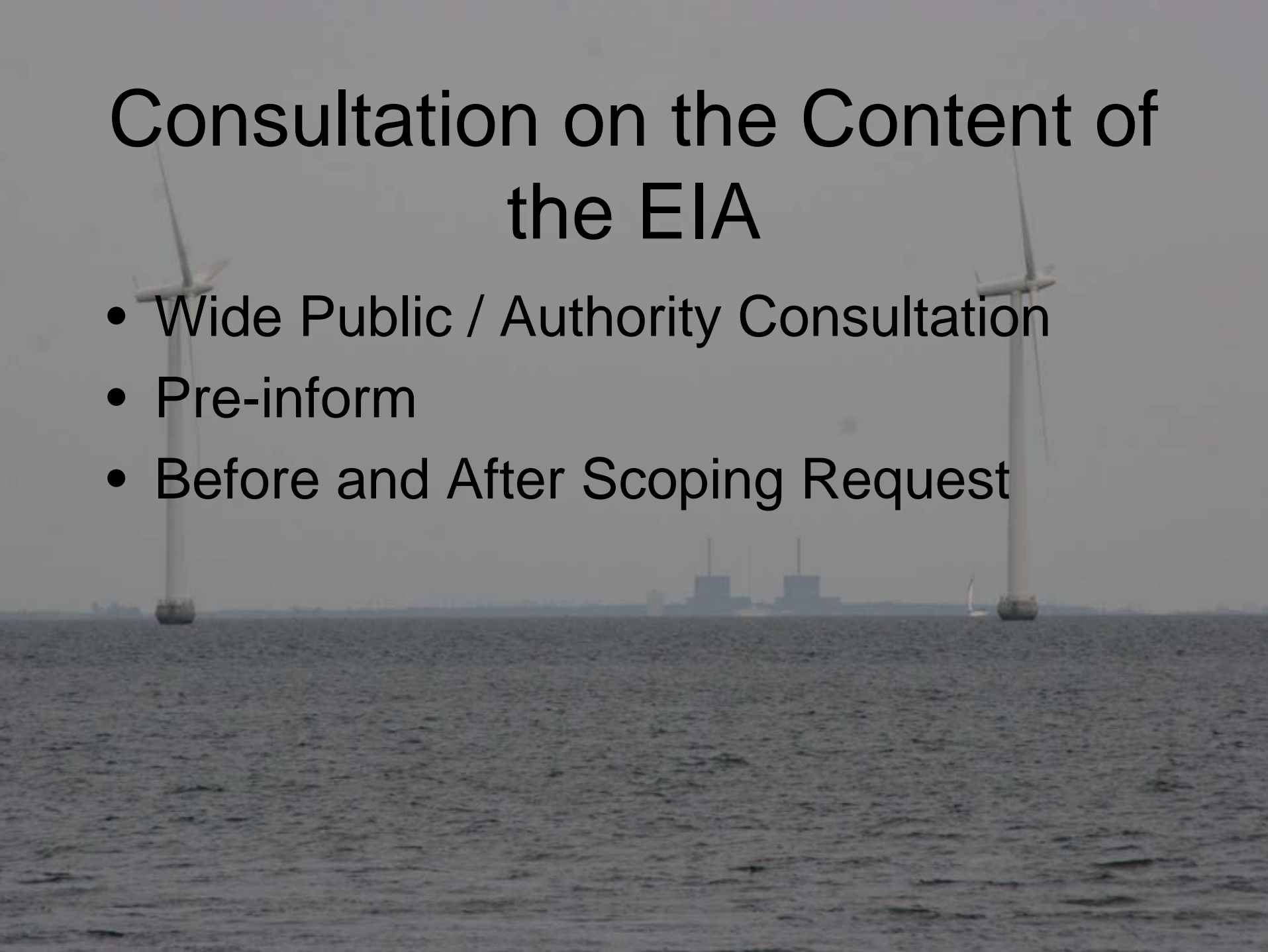
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EIA / Consents Stages

- Consultation on the Content of the EIA
- Initial Survey Work
- Discussions on Initial Survey Results to Inform Full EIA Surveys
- EIA Surveys
- Discussion of the Survey Results / Discussion of Issues with Physical Deployment Activities

Consultation on the Content of the EIA

- Wide Public / Authority Consultation
- Pre-inform
- Before and After Scoping Request



Initial Survey Work

The background of the slide is a photograph of several offshore wind turbines in a body of water. The turbines are white with three blades each. The sky is overcast and grey, and the water is a dark, choppy blue-grey. The turbines are positioned at various distances, with one prominent one on the right side of the frame.

- Geophysical
 - Informed Design / Archaeology Study / Initial Bethic Work
- Landscape
 - Images used in Public Meeting
- Navigation
 - Used for Initial Navigational Risk Assessment and HazID Workshop



Ramsey Island

St David's

St Bride's Bay

Haverfordwest

Skomer Island

Marloes Sands

Milford Haven

Skokholm Island




Westdale Bay

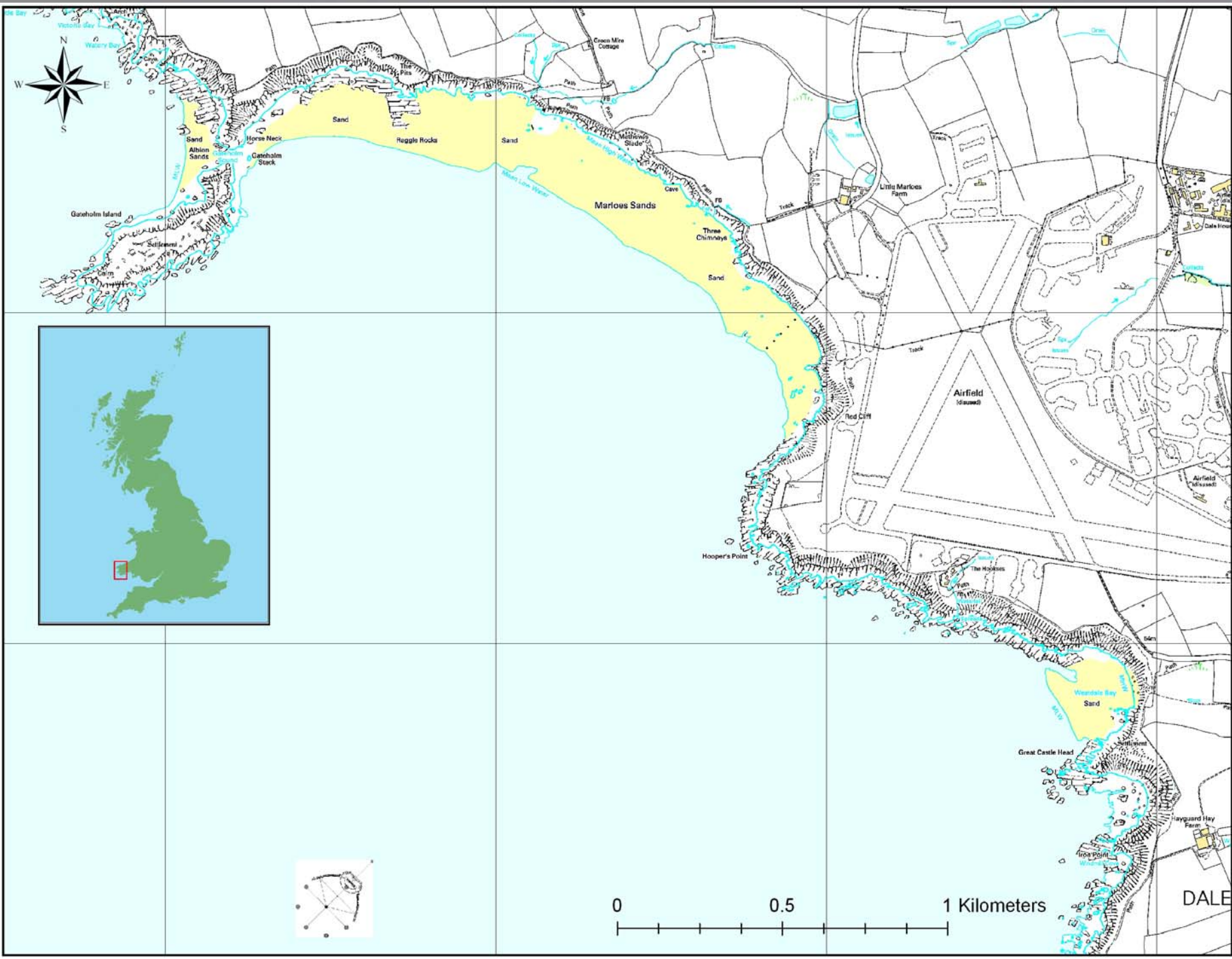
St Ann's Head

Castlemartin

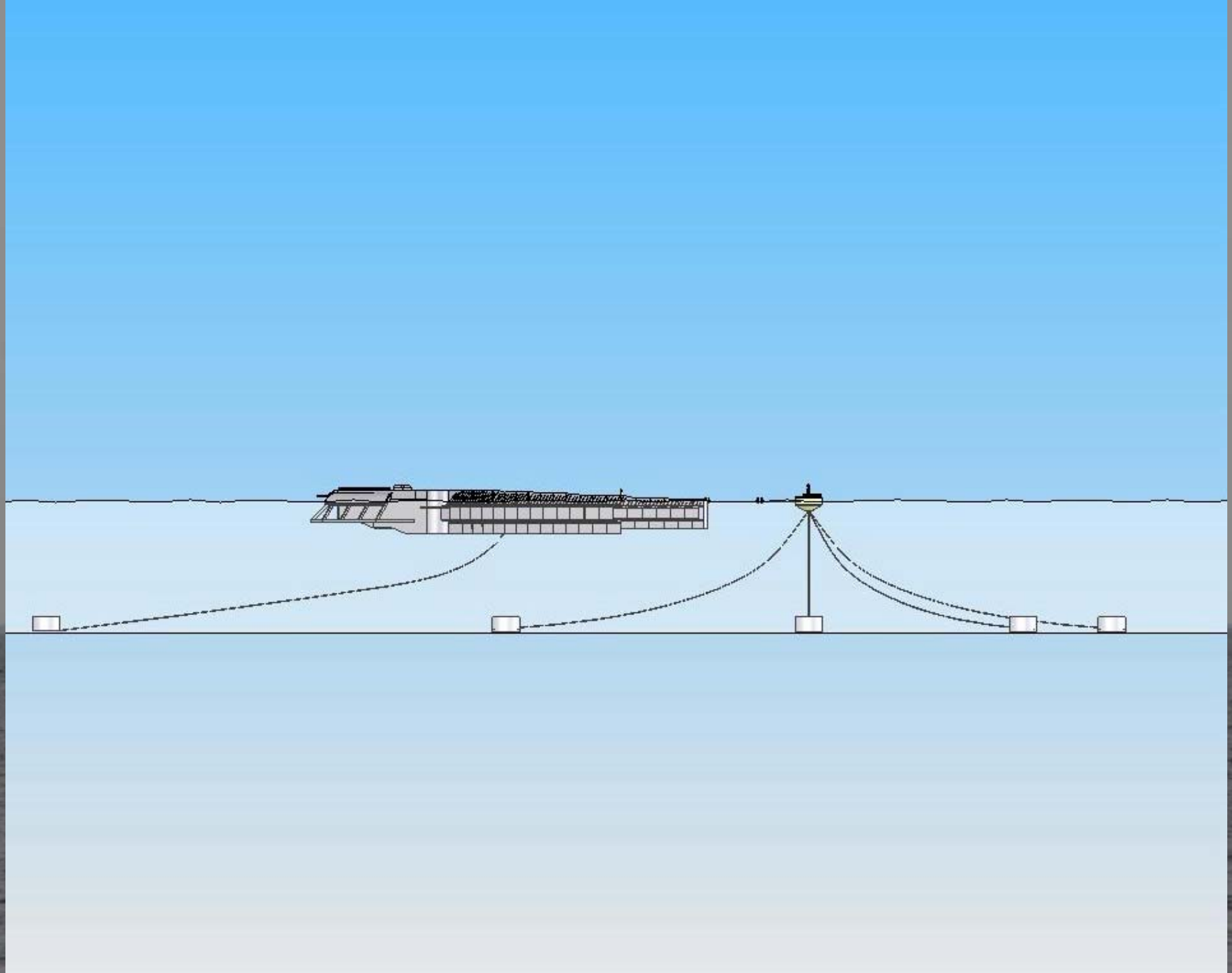
Regional Location of Wave Dragon Study Area

 Wave Dragon Study Area

0 10 20 Kilometers

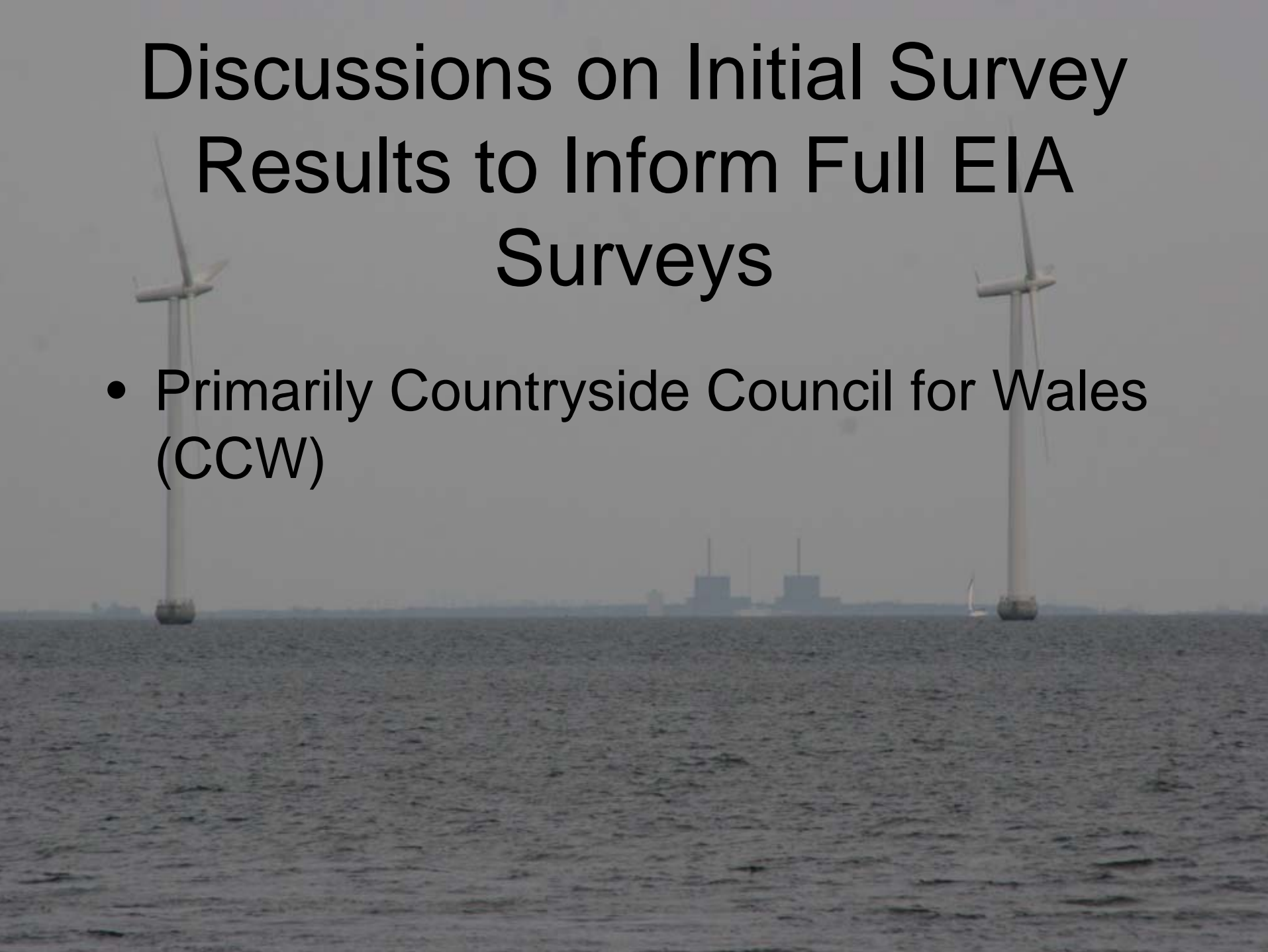


DALE



Discussions on Initial Survey Results to Inform Full EIA Surveys

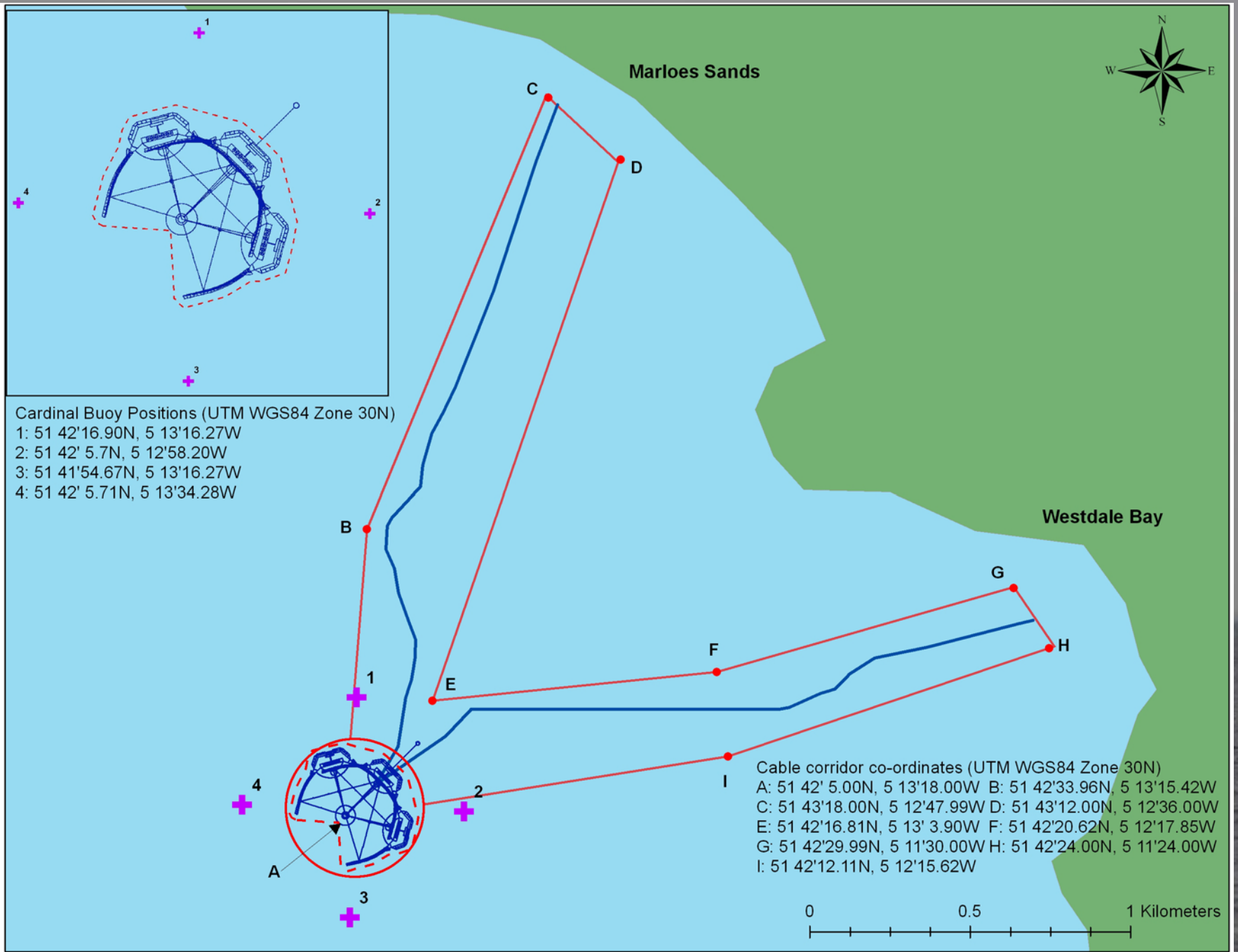
- Primarily Countryside Council for Wales (CCW)



EIA Surveys

The background of the slide is a photograph of a wind farm. Two large white wind turbines are visible, one on the left and one on the right. The sea is dark and choppy. In the far distance, a city skyline is visible under a grey, overcast sky.

- Geophysical Survey
- Landscape Work
- Navigation Survey (February and August 2006)
- Benthic Survey (Summer 2007)
- Coastal Processes
- Ecology
- Archaeology
- Birds
- Navigational Risk Assessment



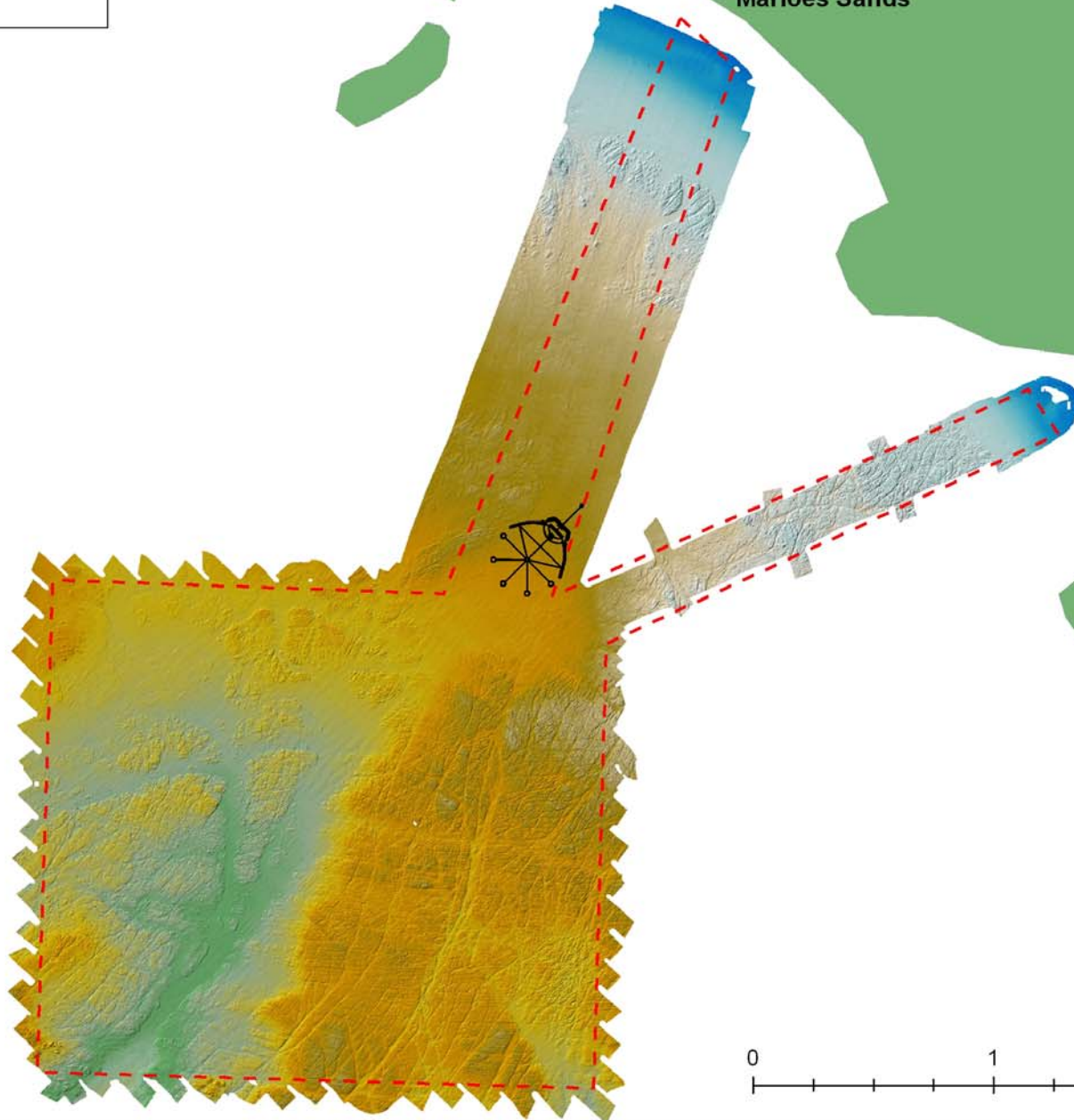
Wave Dragon Device Deployment Location

 Study Area



Metres referenced to chart datum

4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-36
-38
-40
-42
-44



0 1 2 Kilometers

Wave Dragon Device Deployment Location

- Study Area
- Bathymetric depth contours
- Bathymetric survey area




Marloes Sands

Westdale Bay



Wave Dragon Device Deployment Location

 Study Area

 Sand

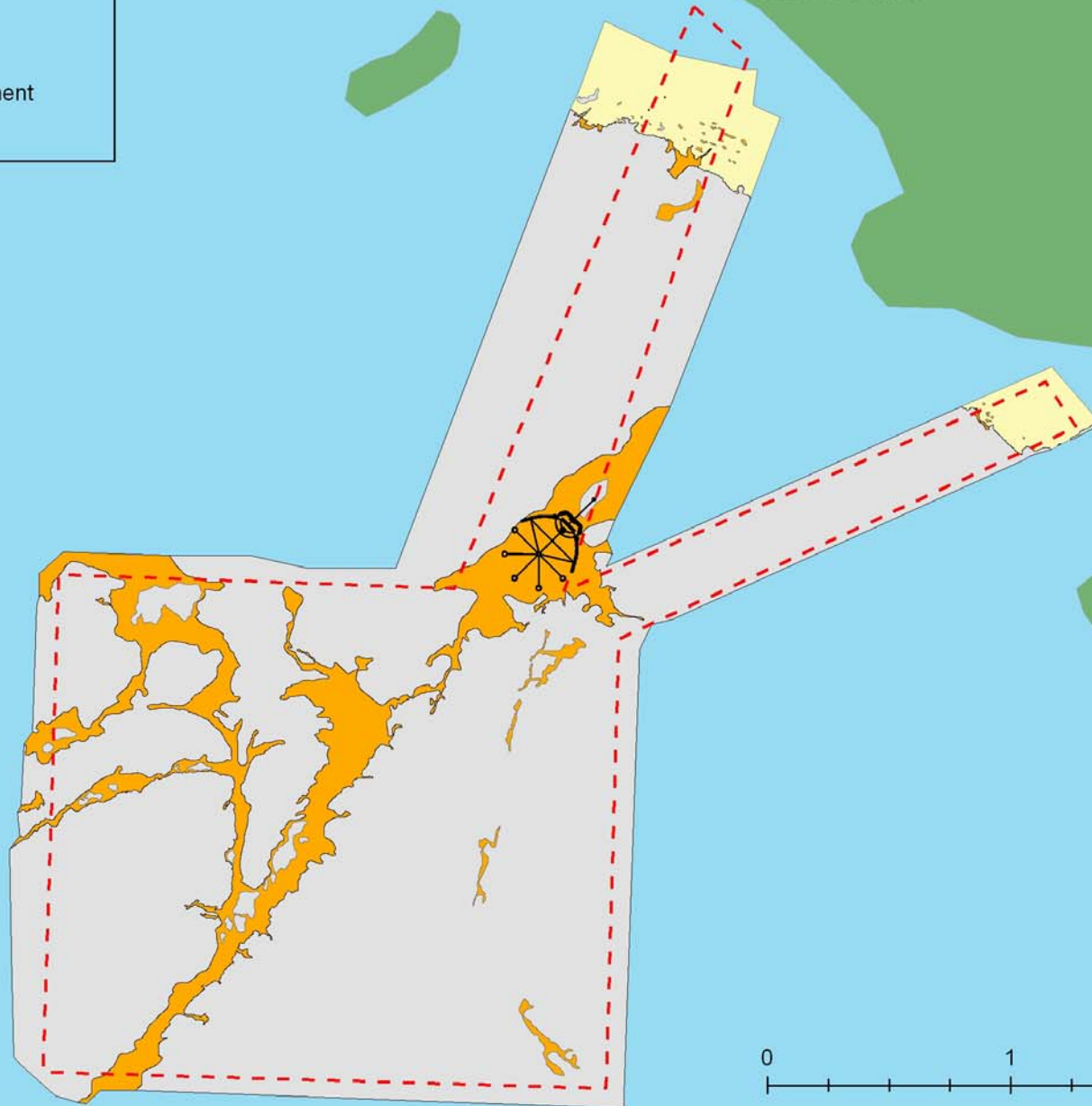
 Coarse sediment

 Rock



Marloes Sands

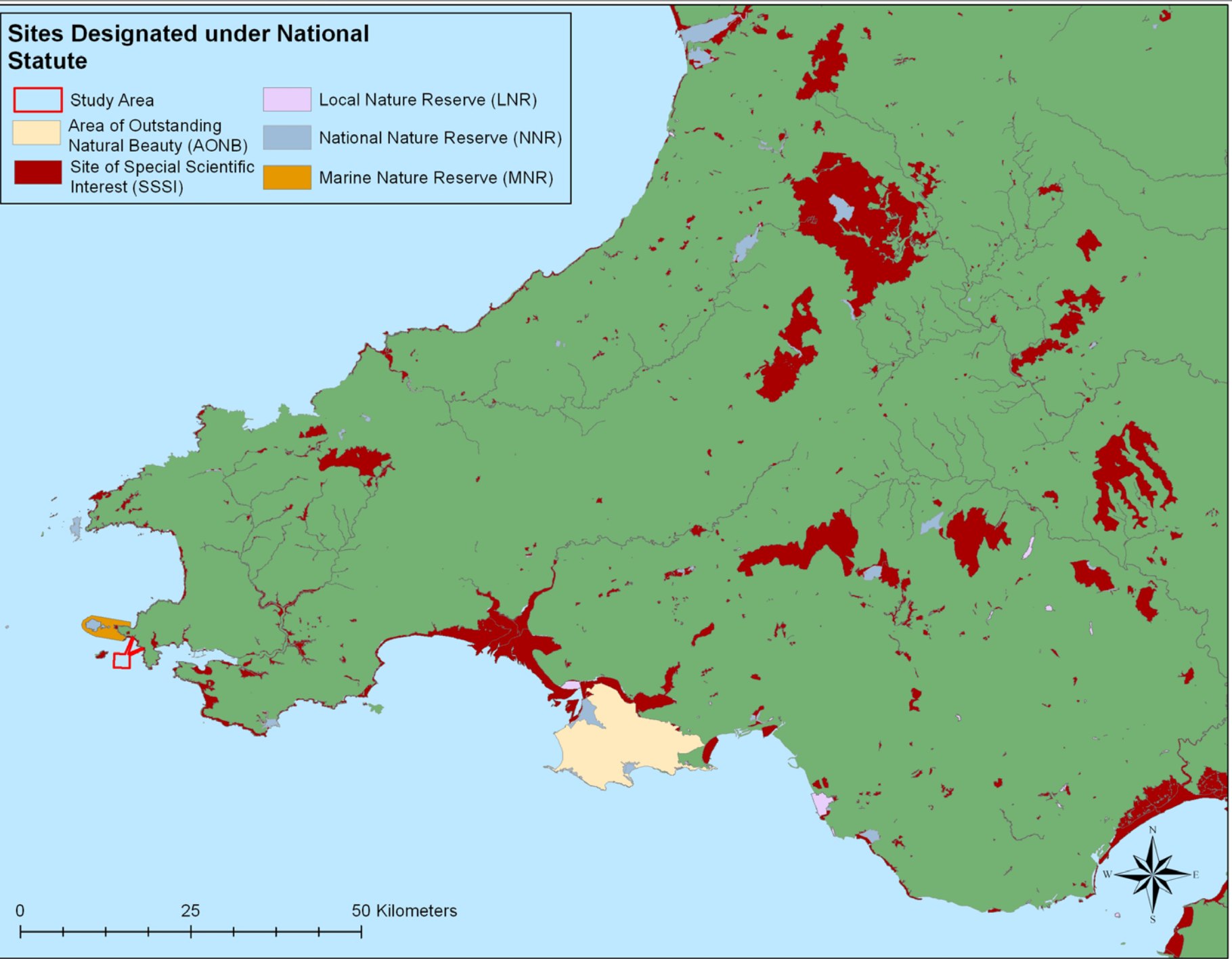
Westdale Bay







0 1 2 Kilometers

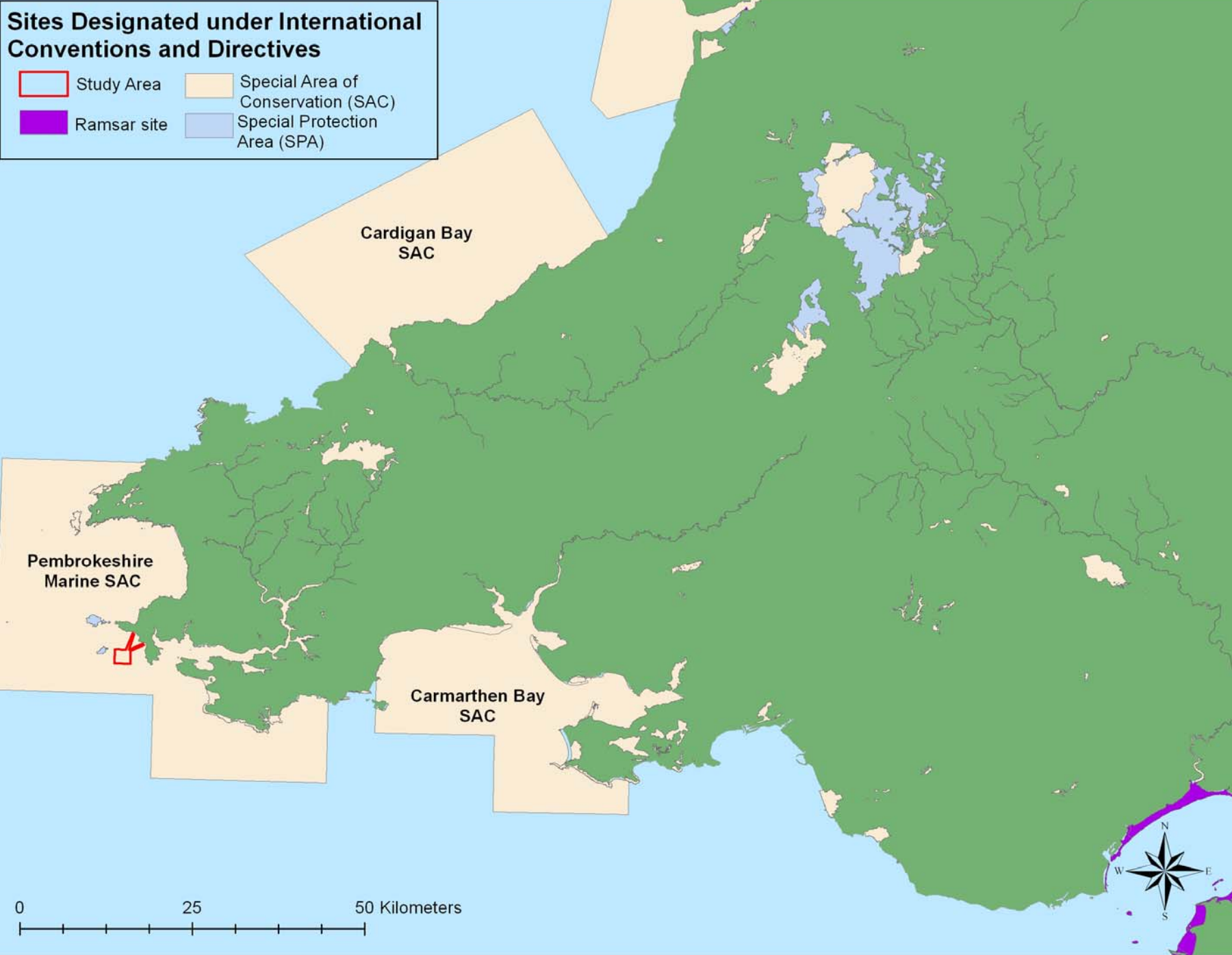
Sites Designated under National Statute

- | | |
|---|---|
|  Study Area |  Local Nature Reserve (LNR) |
|  Area of Outstanding Natural Beauty (AONB) |  National Nature Reserve (NNR) |
|  Site of Special Scientific Interest (SSSI) |  Marine Nature Reserve (MNR) |



Sites Designated under International Conventions and Directives

-  Study Area
-  Special Area of Conservation (SAC)
-  Ramsar site
-  Special Protection Area (SPA)





Important Species Map of Marloes Sands



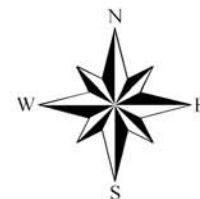
Rumex rupestris

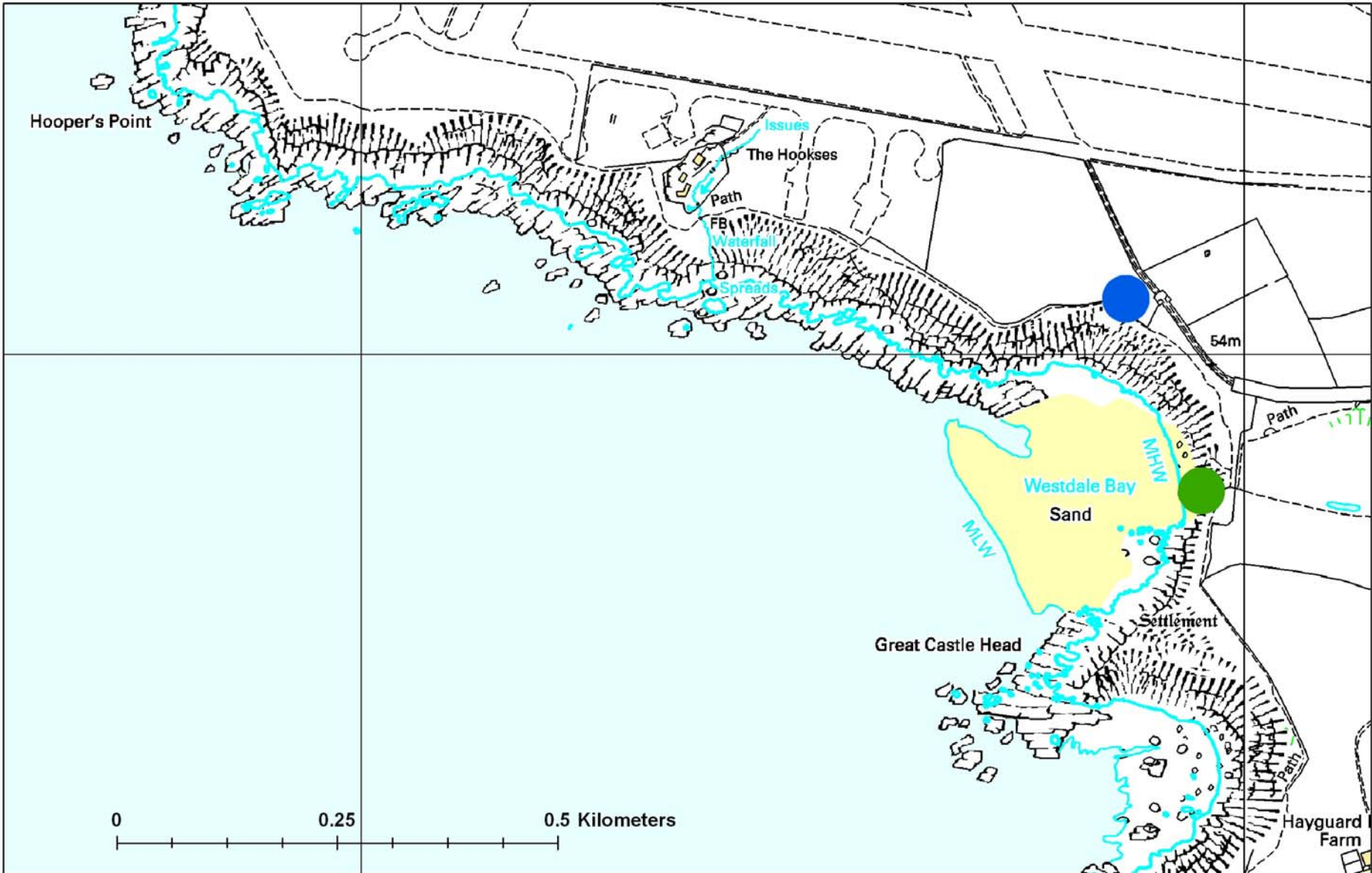


Pseudomogoplistes squamiger




Callilepis nocturna

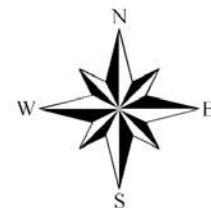




Important Species Map of Westdale Bay


 *Pseudomogoplistes squamiger*

 *Tortula wilsonii*

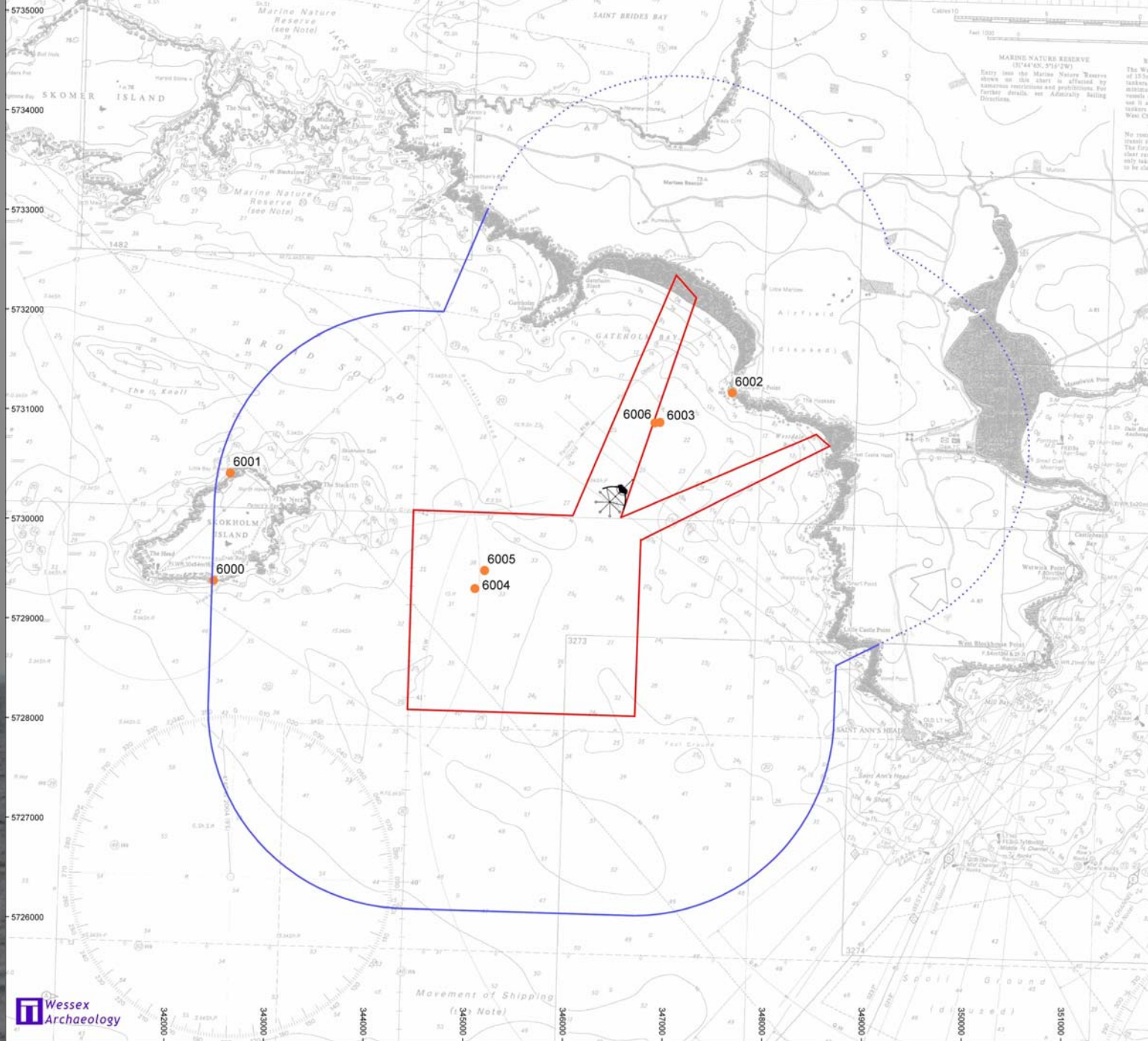




QuickTime™ and a
decompressor
are needed to see this picture.



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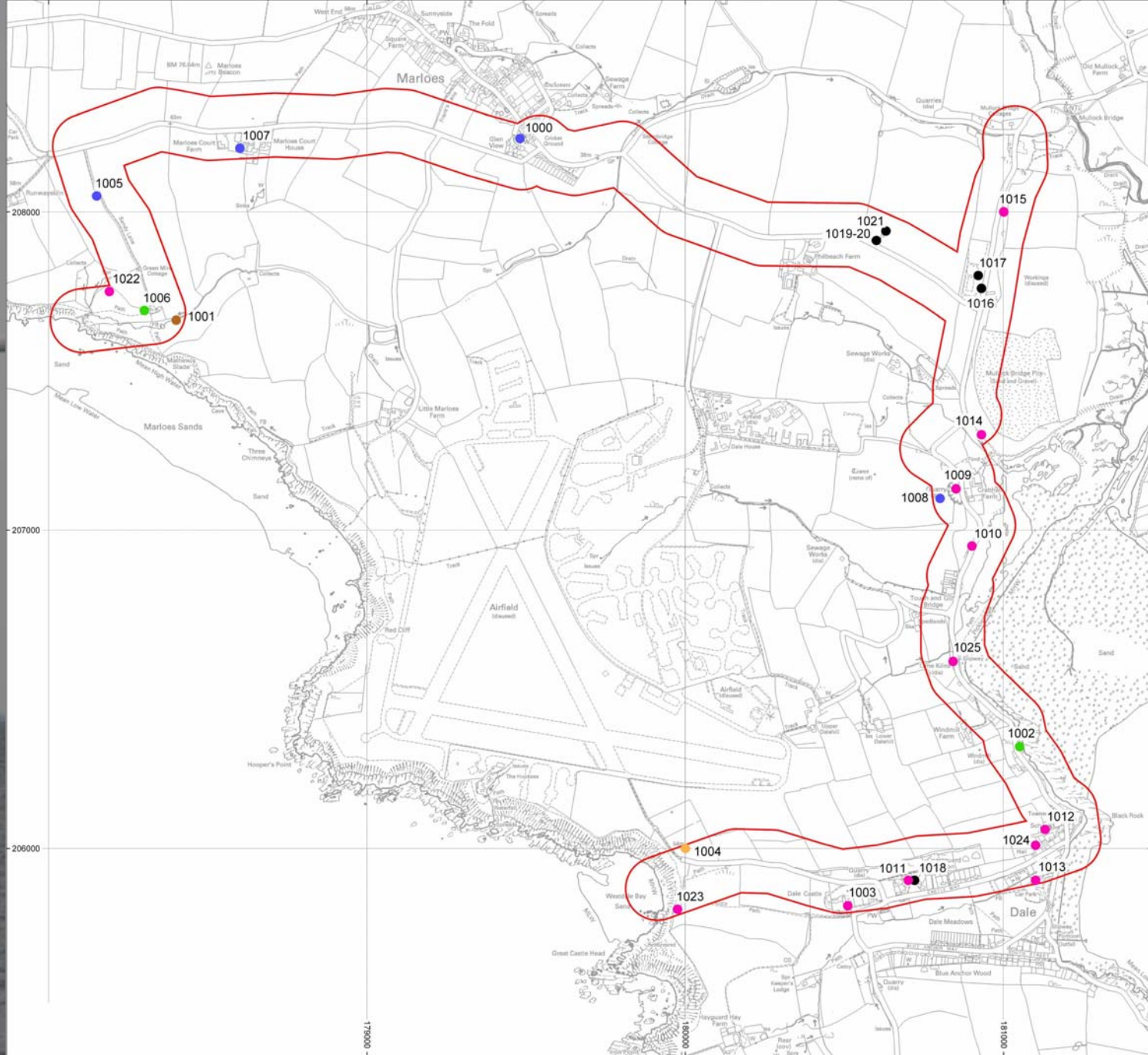


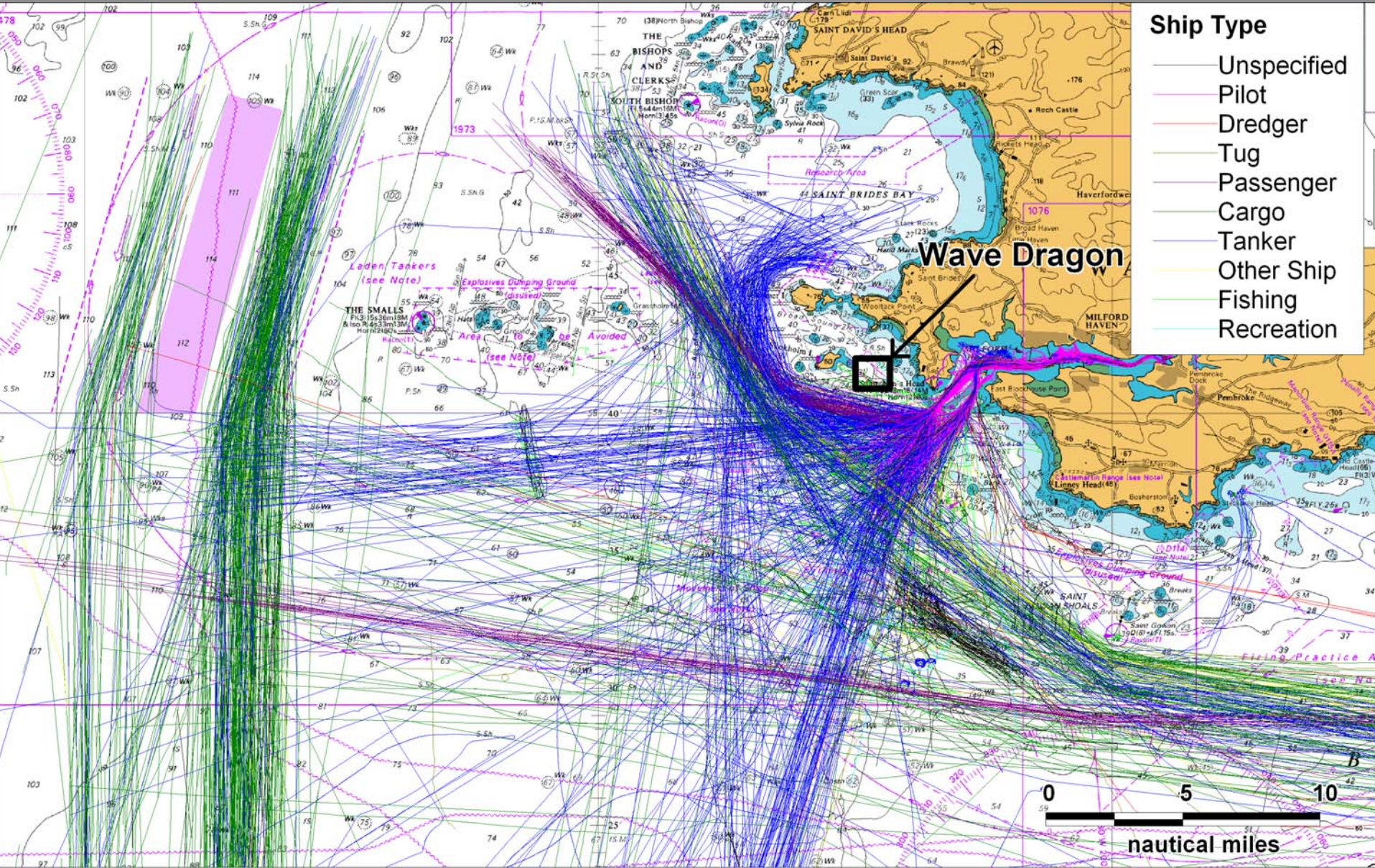
MARINE NATURE RESERVE
(57°24'00" - 57°31'00")

Entry into the Marine Nature Reserve shown on this chart is affected by numerous restrictions and prohibitions. For further details, see Admiralty Sailing Directions.

The West of Skomer lighthouses are shown on this chart in affected by numerous restrictions and prohibitions. For further details, see Admiralty Sailing Directions.

We would thank the The first their rest only take to be clear

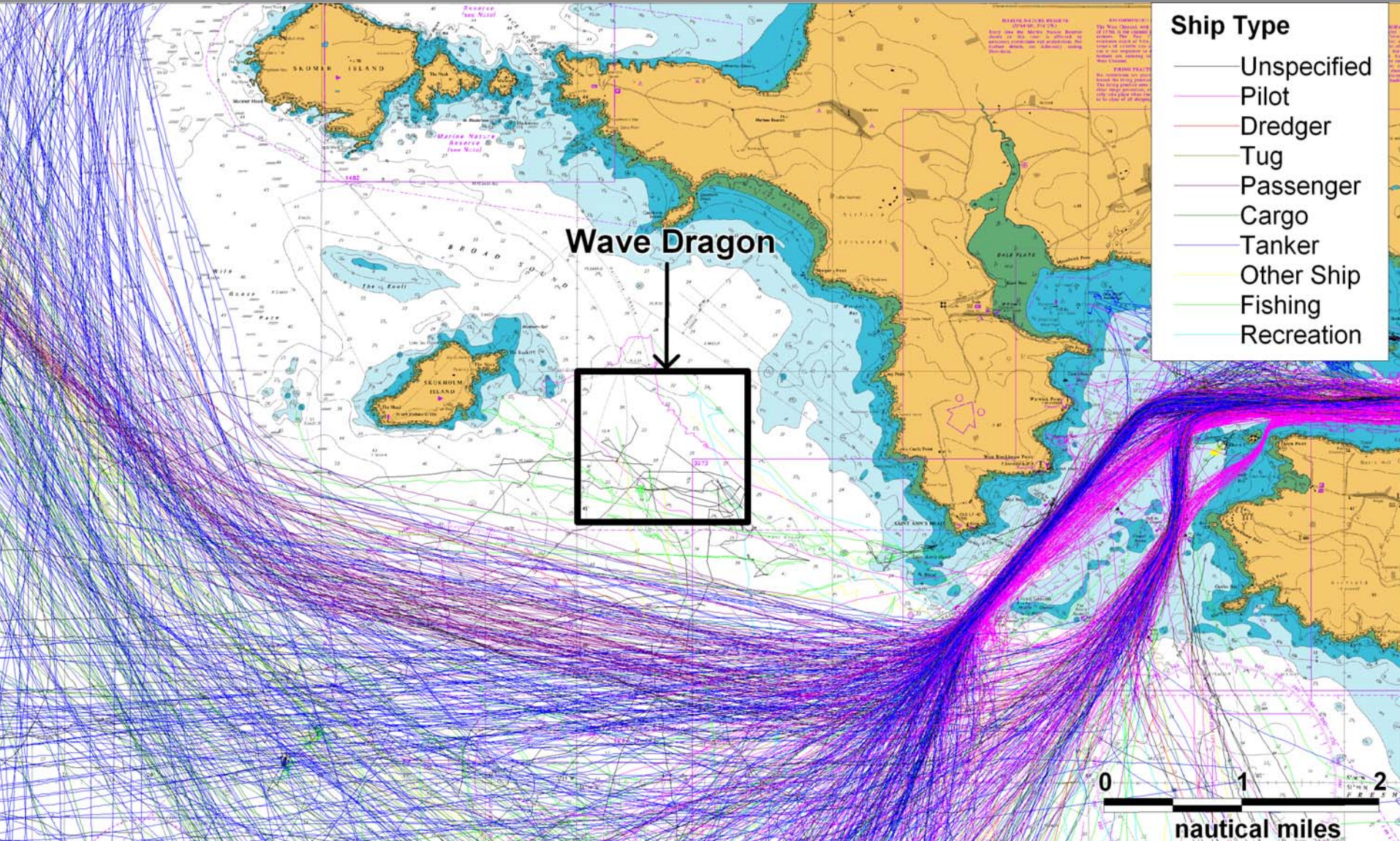




- ### Ship Type
- Unspecified
 - Pilot
 - Dredger
 - Tug
 - Passenger
 - Cargo
 - Tanker
 - Other Ship
 - Fishing
 - Recreation

Wave Dragon

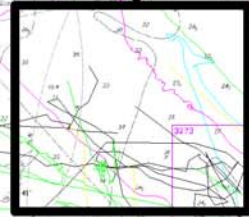




Ship Type

- Unspecified
- Pilot
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- Other Ship
- Fishing
- Recreation

Wave Dragon



The background of the slide is a photograph of a wind farm. Several tall, white wind turbine towers are visible, extending from the water's surface. The sky is a pale, overcast grey, and the water in the foreground is dark with some ripples. The overall tone is muted and professional.

Discussion of the Survey Results / Discussion of Issues with Physical Deployment Activities

- Main Body of EIA Results
- Idea is that All Stakeholders opinions are Discussed with them and Included in EIA before Submission