

Second public consultation – NRW marine license

DEADLINE for submission of responses 9th September 2020

Open consultation on the additional studies and documents provided by Morlais to NRW in support of the Marine License application closes on **9th September**. Link for consultation is <https://tinyurl.com/y3fnsu76>

Morlais submitted an application to NRW for a marine license and this was open for public consultation in Dec/Jan. Besides the statutory consultees (Council, Trinity House etc.) there were 117 responses from the general public with 22 of these being from sea kayakers who enjoy and make their livelihood from the seas around Holy Island. Morlais have now submitted a further 72 documents outlining their response to the issues raised in the first consultation. NRW have now opened a second public consultation on the new material. This is a public consultation and anyone can send in comments regardless of whether you did so to the first round.

SCC have prepared a summary of Morlais's response and new work on socio-economic and navigational safety – other issues e.g. impacts on birds, marine mammals, underwater noise etc. can be downloaded from the NRW Public register <https://tinyurl.com/y4c6ftth> (the easiest way to locate the new material is to sort on date).

If you are happy to share your comments to NRW so we can incorporate them into the submission to the TWA Order public inquiry on behalf of the sea kayak community then please cc your response to info@snowdoniacanooclub.org.

Summary of Morlais activity related to sea kayaking since January 2020.

| Issues raised with Morlais by SCC/CW at meeting 10 Feb 2020 | Morlais response | SCC evaluation |
|---|--|--|
| <p>Socio-economic impacts on businesses via reduced access to areas used by guides/visiting kayakers.</p> | <p>Socio-economic impacts have been further considered in the Supplementary Tourism and Recreation Assessment and Supplementary Socio-economics Assessment.</p> | <p>The new report on Tourism and Recreation completely misses the point about active tourism reliant on unique features of the coastline and sea conditions. They even suggest advertising marine recreation activities as a means of mitigating adverse impacts on tourism. Only good suggestion is more changing facilities and toilets on Holy Island beaches.</p> |
| <p>Reduced amenity/recreation value to themselves and other users due to loss of access/sea areas due to presence of devices/cables etc.</p> | <p>The Tourism and recreation report uses visitor numbers to South Stack Cliffs Nature Reserve (RSPB) to suggest 0.9% increase in visits which is lower than increase at other Anglesey attractions e.g. Newborough 12.2% increase and Ribride visits increasing at 5.7% per year. Monitoring of jobs in tourism sector uses ONS data – no local surveys or counts by different types of activity.</p> <p>“While many visitors come to walk the coastal path, a large proportion of visitors come to the area to participate in marine recreation activities, such as sea kayaking and coastering. Local businesses have invested in new offerings to profit from the area’s popularity.</p> <p>There are concerns that the Morlais development could adversely impact the offering of the area to tourists. For example, through restrictions on kayaking routes, the impact on eddy currents, traffic congestion during the construction phase, access to the coastal paths, and the impact on the scenery.</p> <p>Despite these concerns, there are others that believe Morlais will have a positive impact on the local tourism sector, and there are businesses that have already experienced this. Contractors and engineers working on the development stay in the local area, which benefits local hotels and restaurants and this trend is only expected to grow as the Morlais development progresses. The</p> | <p>Basically, they assume tourists are mostly walkers and impacts are mostly visual and installation will be accepted as part of the landscape by most visitors.</p> <p>The report expects benefits of Morlais’ renewable energy / low carbon tourism opportunities to outweigh any disbenefits which in any case are expected to be minor.</p> <p>Indicators of adverse impacts are to be official statistics of employment in the tourism sector, counting people on coast path and repeats of interviews with local businesses.</p> |

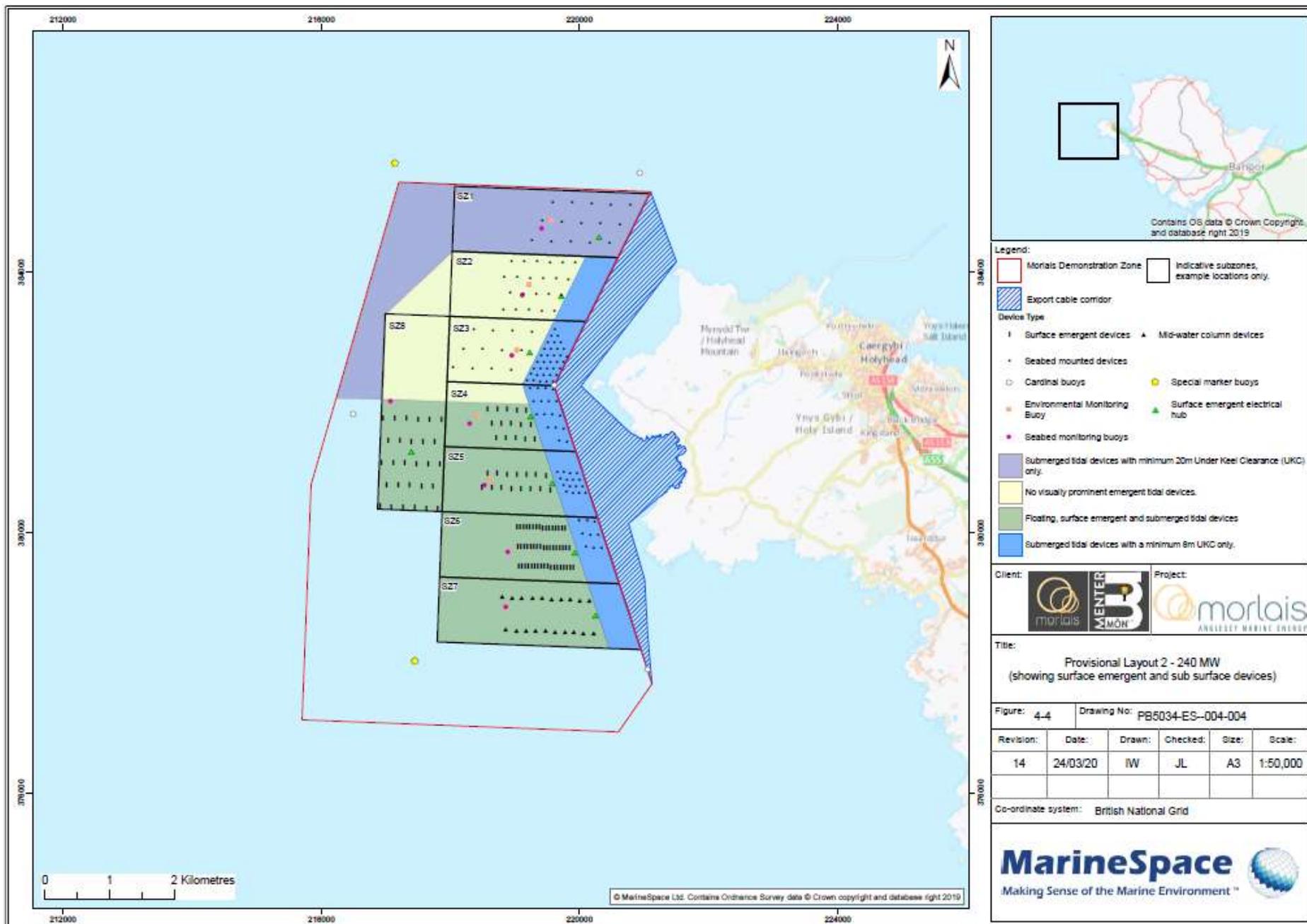
| Issues raised with Morlais by SCC/CW at meeting 10 Feb 2020 | Morlais response | SCC evaluation |
|---|--|----------------|
| | <p>importance of ‘business tourists’ was highlighted given those who come to the area on business during the week will return on holidays with their family.</p> <p>While Morlais brings contractors and engineers to stay and eat in the area, the development could also benefit the local tourism and recreation sector in other ways. There are businesses that believe tourists will be interested in seeing the tidal energy development (i.e. ‘industrial tourism’), and that Morlais is a continuation of Anglesey’s rich history of innovation and relationship with the sea. Experimentarium in Copenhagen was given as an example of how new technology and innovation can be used to attract visitors to the area.”</p> <p>Study did 8 interviews – including Anglesey Adventures and SCC – but only picked up suggestions for improvements to tourism offers from interviews and did not address any of the negative impacts.</p> <p>Gave 3 case studies: Pembrokeshire demonstration zone which suggests only 3.5% of visitors were put off visiting again; Orkney where green branding based on tidal energy installations has not put off tourists and Gwynt y Mor which hasn’t put reduced number of people on Orme tram. On this basis report concludes impact on tourism will be minimal.</p> <p>The 15 page socio-economic report only describes potential benefits arising from Morlais to Anglesey. They expect local spend to be 15% of costs in construction phase and 35% during operation leading to 22% of jobs associated with development being taken up locally in Anglesey.</p> | |

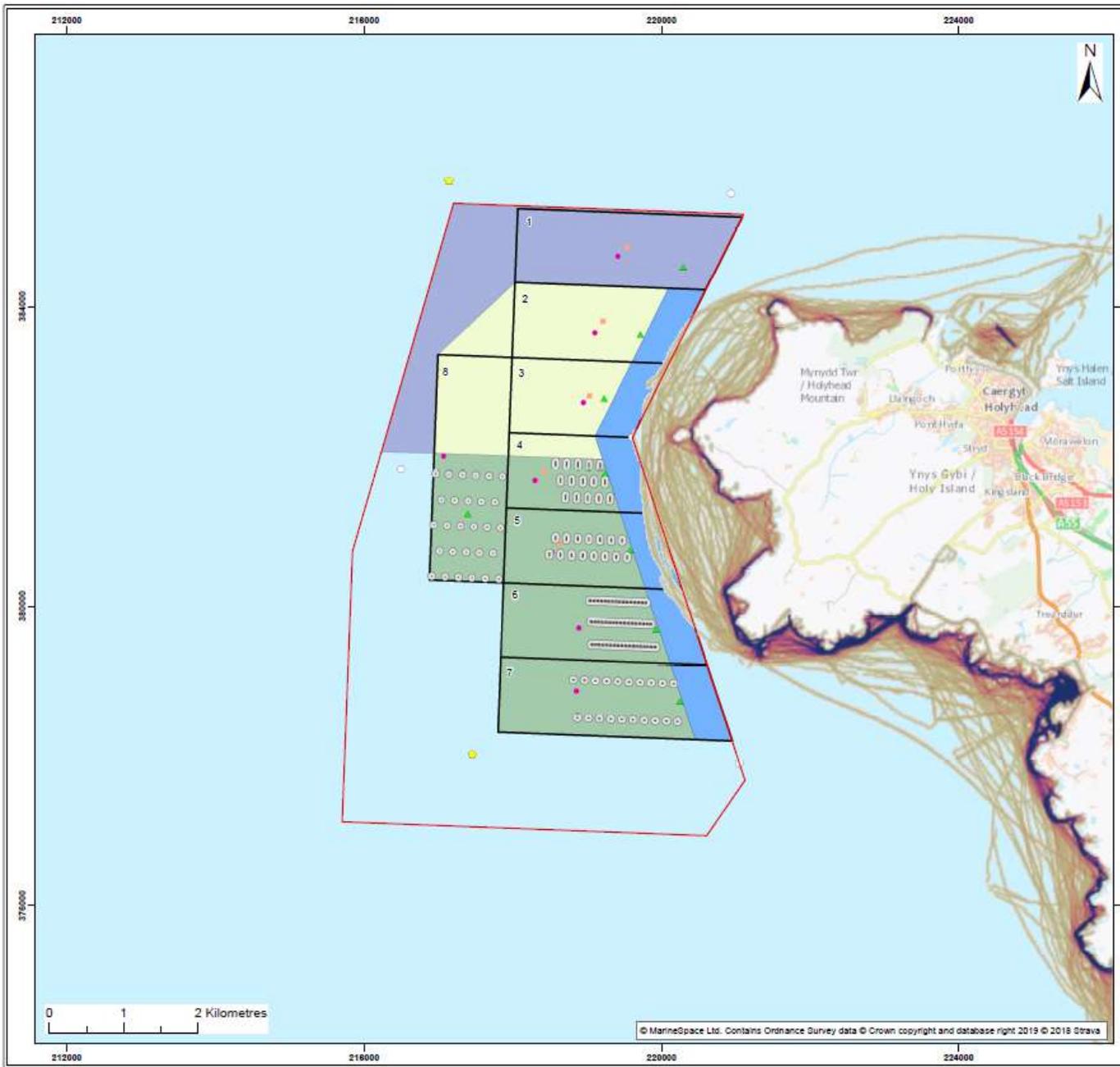
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| <p>Changes in hydrodynamic regime = reduction in amenity value.</p> | <p>New modelling of flow rates and wave heights provided. See Coastal processes modelling report.</p> <p>Modelling suggests that turbine supports which rise 6 m above seafloor would not impact on surface waves. Also suggested that turbines 8 m under keel would also not have any impact on surface waves. Significant wakes on electrical hubs (6 m diameter towers rising from seafloor to 18 m above surface). Average flow speeds between MDZ and shore increased by 0.2 ms-1 with what appear to be much greater increases in peak speed of the main races and around headlands. Wave heights will also be affected and may be up to 0.5 m higher. Tide likely to be offset 5 degrees to west around outside of array.</p> | <p>The modelled structures do not match those in the new worst case layout.</p> <p>Model is 2D depth integrated model which uses a 30-50 m resolution outside the array. It is suggested that 3D models with finer resolution is better for modelling the complex flows around the headlands and eddies.</p> <p>No directions given on flows so can't see if eddies change. Would ideally need to see hourly changes through tide cycle and at neaps as well as springs.</p> <p>There is no modelling of far field effect i.e. no indication of what this might mean for flows at Skerries or Bardsey.</p> |
| <p>Safety issues from interactions of kayakers with project infrastructure</p> | <p>Morlais previously stated that to address safety issues from interactions of kayakers with project infrastructure that the NRA is being reviewed with reference to this specific point and supplementary information regarding this point will be provided. This work has now been completed and the following statement provides the supplemental information as requested.</p> <p>From Document MOR/RHDHV/DOC/0137 which is a response to NRW dated 3 July 2020 (they had been asked by NRW to include kayaks in NRA):</p> <p>“Response on the consideration of Canoeists and Kayakers within</p> | <p>This is completely inadequate.</p> <p>Further work has been commissioned on recreational navigational risk assessment by Marico Marine.</p> <p>SCC/Canoe Wales advised at the meeting with Morlais that neither grab chains or ladders would work and would in fact make the obstacles more hazardous.</p> |

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| | <p>the Navigation Risk Assessment: The purpose of a Navigation Risk Assessment is to identify and assesses the hazards and risks affecting all vessel navigation within an area of interest, before then considering the current controls to mitigate risks and further identify controls that could be adopted to minimise risk as low as reasonably practicable (ALARP). Consequently, and in support of this marine license application, Canoeists and Kayakers have received the same level of navigational risk scrutiny as other vessel based sea-users operating within the vicinity of the Morlais Development Zone (MDZ). Whilst recreational vessels within the NRA are not subdivided further, the concerns of the Canoeists and Kayakers have been covered within the Navigation Risk Assessment and specifically under 'recreational vessel contact with surface devices'. This considers the paddler/people element (in terms of consequence i.e. personal injury to fatality) not just the impact to the recreational vessel.</p> <p>Hazard scoring undertaken here was based on a range of information collected during stakeholder consultation meetings, as well as drawing on the extensive experience of the Consultant Mariner engaged to undertake the risk assessment. Furthermore, noting that the types of device to be deployed across the MDZ had not been finalised at the time of the NRA, the hazard frequency scoring erred more towards the cautious i.e. a higher likelihood, resulting in higher risk scores. Despite this, the risk to Canoeists and Kayakers [recreational vessels] navigating in proximity to surface devices remains low.</p> <p>Nevertheless, in wanting to demonstrate a responsible approach here, the developer is interested to further mitigate risk to</p> | |

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| | <p>Canoeists and Kayakers via further consultation and consider whether additional mitigation measures would provide them with the reassurance they seek. Typically measures here may include:</p> <ul style="list-style-type: none"> • Each device to be fitted with grab chains; and • A number of devices in each array to be fitted with a ladder to enable a person in the water to get onboard the device as a refuge in an emergency.” | |
| <p>500 metre safety zones closing off the inshore route</p> | <p>The ES advised that for the operation and maintenance (including repowering) phase there will be a need to restrict navigation, anchoring and fishing activity within the MDZ and the export cable corridors. This will be achieved by excluding any navigation within an “operational safety zone” of up to 500m of any offshore works. We can confirm that there is no intention that by imposing an operational safety zone that this would close off the inshore route. Safety zones will be determined based on risk assessments for the required works and will be minimised to ensure as little disruption as possible to navigation along the inshore route whilst also ensuring the safety of all navigators and offshore works.</p> <p>Use of guard vessel(s) where appropriate during construction (and repowering), maintenance and decommissioning phases.</p> | <p>Really asking for us to take this on trust as there is no detail provided on what restrictions will be necessary during construction and how cable installation out of Abraham’s Bosom and passage around South Stack will be handled.</p> <p>Not clear what to expect from interactions between guard vessels and kayakers.</p> <p>Little appreciation that kayakers are not able to avoid entering exclusion zones if undertaking a rescue.</p> |

New work on navigational safety for recreational vessels is underway. The first stage of this was a new study of the interactive boundaries to the north (ferry routes) and east (recreational vessels). This resulted in a change to the eastern boundary to give more space which as shown in kayak tracks collated by Morlais from Strava would accommodate the majority of kayak trips.





Legend:

- Morlais Demonstration Zone
- Indicative subzones, example locations only.

Device Type

- Surface emergent devices
- Operational exclusion zone
- Cardinal buoys
- Environmental Monitoring Buoy
- Seabed monitoring buoys
- Submerged tidal devices with minimum 20m Under Keel Clearance (UKC) only.
- No visually prominent emergent tidal devices. May include limited visible components, subject to agreement under Device Deployment Protocol.
- Floating, surface emergent and submerged tidal devices
- Submerged tidal devices with a minimum 8m UKC only. May include limited visible components, subject to agreement under Device Deployment Protocol.

Recreational Activity

Low High

- Special marker buoys
- ▲ Surface emergent electrical hub

Client: **Project:** **ANGLESSEY MARINE TRUST**

Title: Recreational kayaking activity in the vicinity of Morlais Zone (Provisional Layout 1 - 240 MW (showing surface emergent tidal devices only) shown) with operational exclusion zones

Figure: 15-14 Drawing No: PB5034-ES-015-014

| Revision: | Date: | Drawn: | Checked: | Size: | Scale: |
|-----------|----------|--------|----------|-------|----------|
| 02 | 20/05/20 | IW | PD | A3 | 1:50,000 |

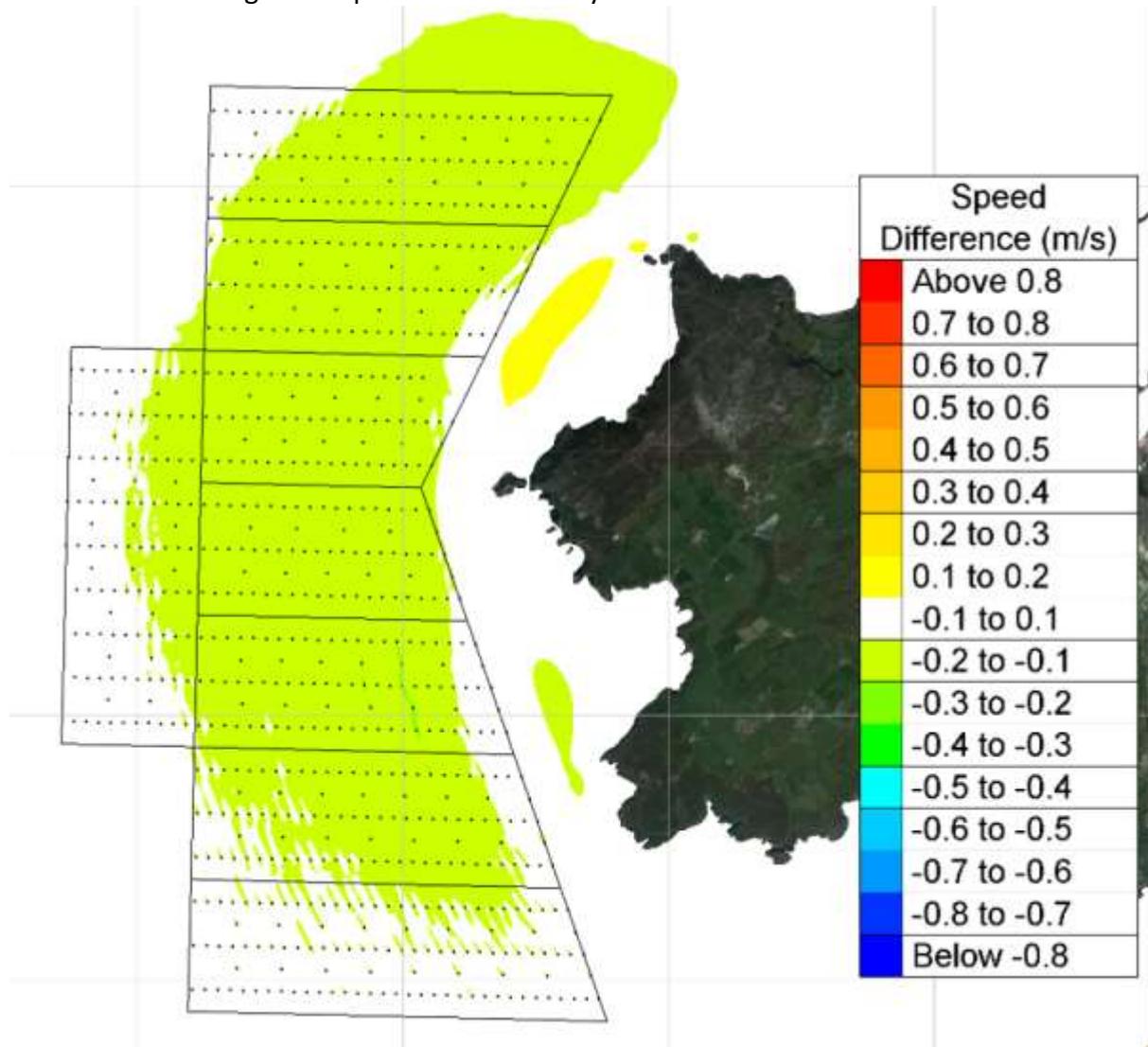
Co-ordinate system: British National Grid

MarineSpace

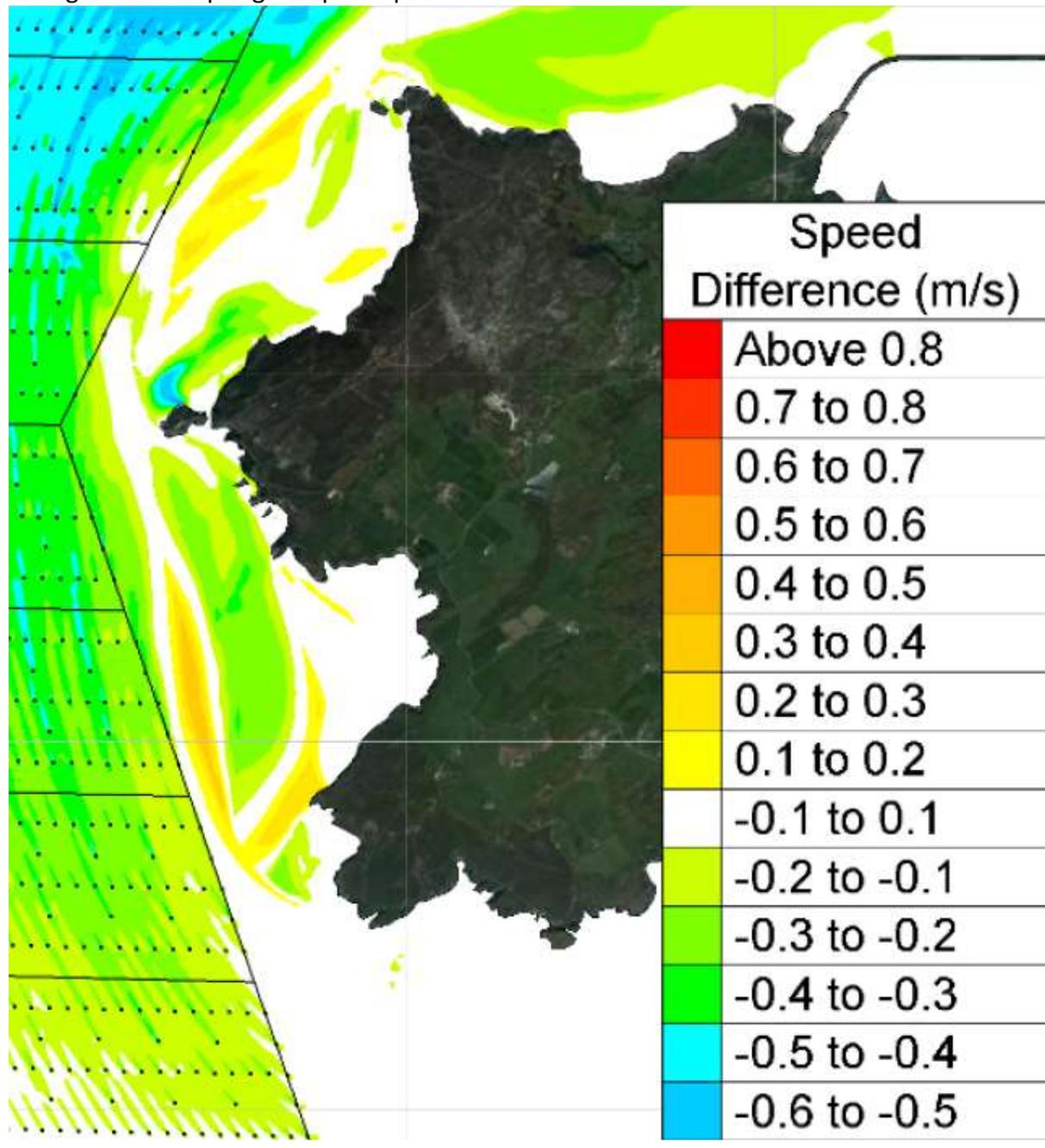
Making Sense of the Marine Environment™

Key figures showing model outputs from the new hydrodynamic modelling (Document MOR/HRW/DOC/0001) Note that the array used in the model does not match the new array layout.

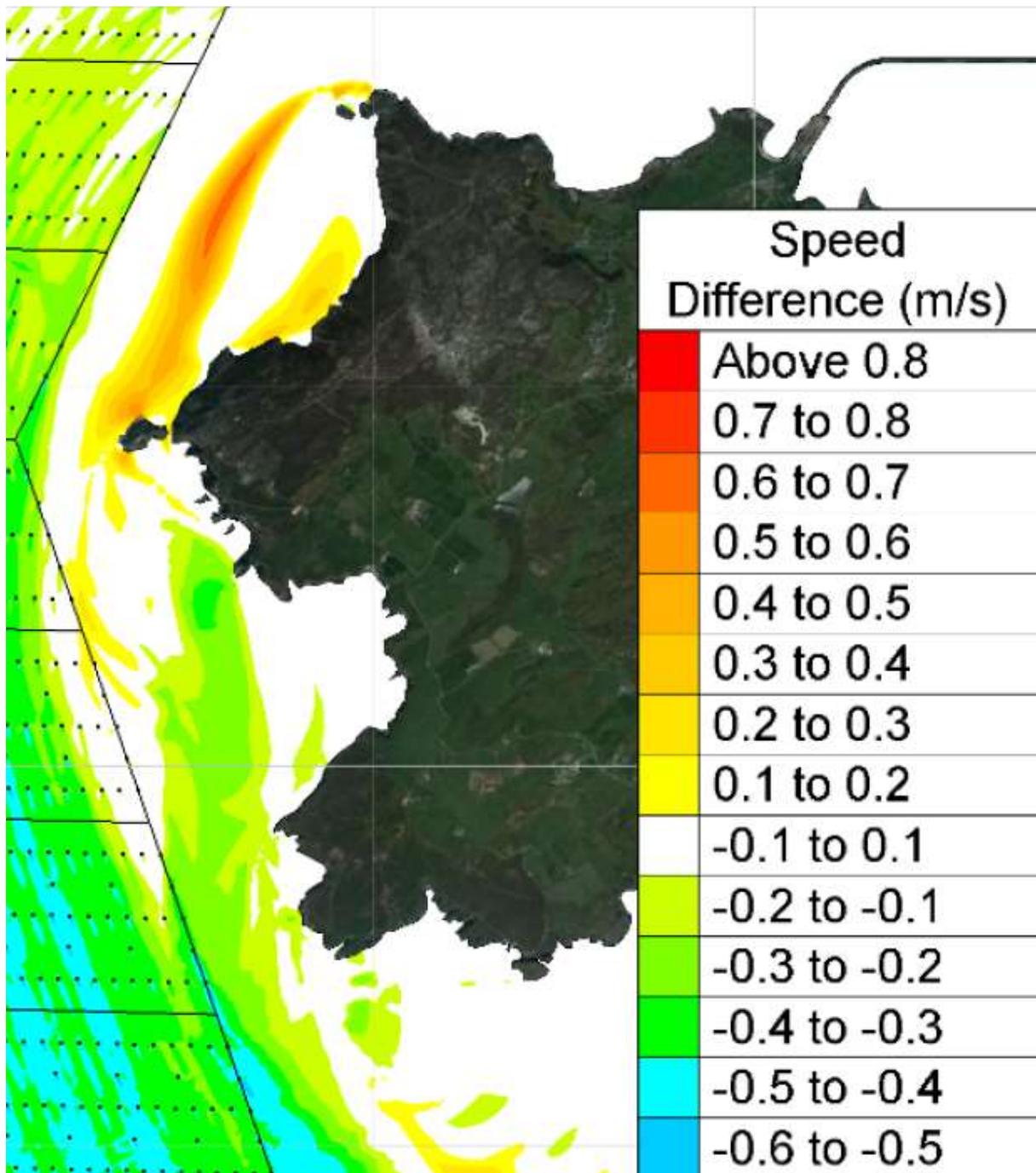
Difference in average flow speeds over 29.5 days



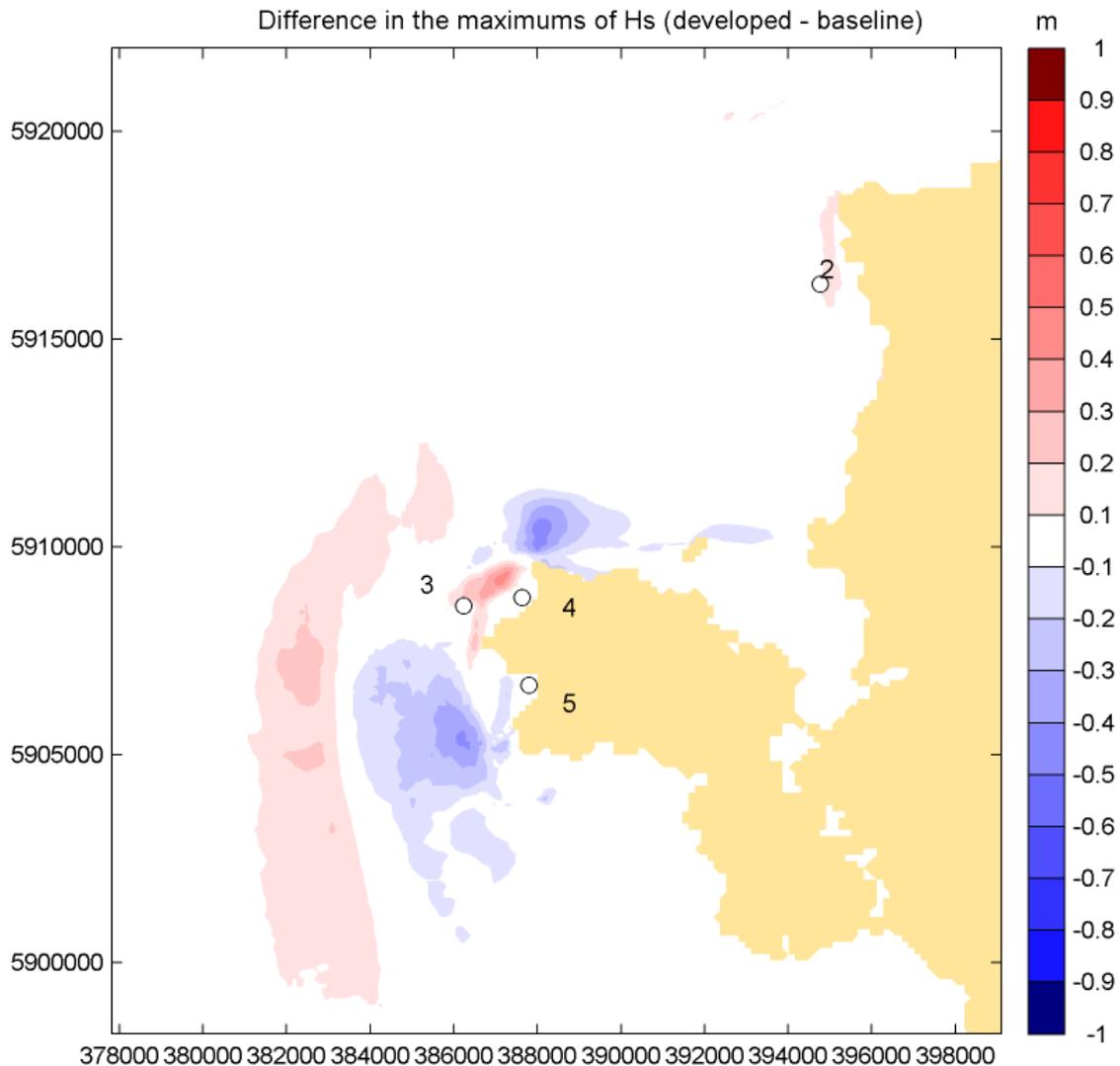
Change in mean spring tide peak speed FLOOD



Change in mean spring tide peak speed EBB



Wave model simulations were run for wind-generated waves meeting changing currents through a tidal cycle for a range of wind directions. It appears that, in wind against tide conditions, waves in South Stack race may increase by up to 0.5 m while waves behind Penrhyn Mawr may be up to 0.3 m lower and 0.5 m lower at North Stack. Note that there is apparently no modelling of changes to the size of the standing waves in the race resulting from increase or decrease in current speeds shown above.



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Figure B.11: Difference in the maximum wave height throughout a tidal cycle at each node for a wave direction from 210°N