

FEAS Observations on MUL250015 – Kilkieran Bay, Arramara Teo

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Summary

- The application is for a 10-year license to hand harvest 4,534 tonnes per year of *Ascophyllum nodosum*/*Fucus* spp. seaweed in Kilkieran Bay, Co. Galway.
- Due to the littoral distribution of *A. nodosum* and *Fucus* spp. the impact on fish ecology, fishing activities and aquaculture is likely to be minimal.
- Potential impacts to the intertidal habitat and productivity of targeted seaweed species should be evaluated.
- Cumulative impacts of similar activities being undertaken in similar time and spatial ranges should also be considered.

Fisheries Ecosystems Advisory Services (FEAS) Marine Institute, were asked by DAFM for observations on MUL250015, an application for a foreshore licence, transferred to MARA and designation as a MUL, submitted by Arramara Teo. for the purpose of seaweed harvesting in Kilkieran Bay, County Galway.

The following response is with consideration of potential impacts on sea fisheries and the seafood sector, including aquaculture.

General comments on all seaweed MUL applications

While individual proposed activities may have minimal effects on an area, its habitats, ecology and fishery, multiple applications within similar timeframes, area, habitats, fisheries may have cumulative effects that are not collectively estimated or considered in the individual applications.

Where SACs and SPAs are present, it should be verified that the particular activity complies with regulations that will safeguard the ecological integrity of the proposed site in view of the site's conservation objectives under Article 6 of the Habitats Directive and also have regard to the requirements of the Environmental Impact Assessment Directive.

Where sub-tidal zones marked for harvesting of seaweed can be subject to considerable coastal erosion, removal of substantial quantities of *Ascophyllum* or *Fucus* species may allow more wave action on the intertidal zone and therefore potentially contribute to further erosion.

The MUL applications, although in some cases propose a total harvest, don't assess or estimate the sustainable harvestable biomass or address the resilience of *Ascophyllum* and *Fucoids* and associated biodiversity to harvesting and how the harvest strategy would take account of this. Rotational harvesting, cutting methods and the proposed spatial extent of harvesting annually are all relevant.

The associated post harvesting and transport logistics associated with the activity and the potential effects on other marine users of piers and access roads is not described. This can be relevant given the remote locations of the harvest sites.

The proposed harvesting targets species that are components of Group 2 habitats (Macroalgal forests; Seaweed communities on full salinity Atlantic littoral rock and *Fucoids* on variable salinity Atlantic littoral rock) listed in the Nature Restoration Regulation and which are subject to restoration targets. Seaweed harvesting is a significant pressure on these habitats and could compromise the achievement of restoration targets. It is important therefore to estimate the cumulative footprint of all such licence applications and how in combination with other pressures they may affect restoration targets. These habitats are also components of Habitats Directive habitat codes 1170, 1160 and 1130.

Due to the littoral distribution of *A. nodosum* and *Fucus* spp. which tend to be shallow, the impact on fishing activities is likely to be minimal. Likewise, spawning and nursery grounds of commercial important fish species, close to the proposed harvest areas, are not likely to be affected. None-assessed, coastal and inshore species such as wrasse are not considered in this position.

Application-specific comments

The application is for a 10-year license to hand harvest 4,534 t per year of *Ascophyllum nodosum*/*Fucus* spp. seaweed in Kilkieran Bay, Co. Galway.

The Application states “Importantly, no offshore Special Areas of Conservation (SACs) or marine Special Protection Areas (SPAs) are proximal to the harvesting zones. The closest SACs to the MUL area, such as the North- West Porcupine Bank SAC (IE002330) and the Porcupine Shelf SAC (IE002267), are situated at distances over 100 km, well beyond any area of influence.” However, the site is within the Kilkieran Bay and Islands SAC (IE002111). This is not mentioned in the AIMU document – although it is in the SISA document.

The proposed MUL area either overlaps with or is adjacent to several key fisheries. These include pot fishing (targeting lobster *Homarus gammarus* and shrimp *Crangon crangon*), net fishing (primarily for Bait, some Crayfish (*Palinurus elephas*) net fishing occurs in deeper waters to the south of Kilkieran), line fishing (for Pollack (*Pollachius pollachius*) and Mackerel (*Scomber scombrus*) occur in deeper waters south of Kilkieran), bottom trawl (for Mixed Demersal which occurs in the deeper water south of Greatmans Bay and Cashla Bay) and dredge fishing (for species like native oyster *Ostrea edulis* and scallop *Pecten maximus*). There is no overlap between the MUL area and commercial bottom trawling or line fishing zones.

The MUL area also overlaps with harvesting areas for periwinkle *Littorina littorea*.

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Eighteen aquaculture facilities are licenced within the proposed MUL area, five for oysters, twelve for salmon and one for seaweed.

The Assessments of Impacts of the Maritime Usage Report states that “Additionally, important offshore spawning grounds for Herring [...] are distant from the harvesting area and thus remain unaffected.” This is factually incorrect. Figure 9 of the same report clearly indicates that herring spawning beds occur within 500m of the MUL area.

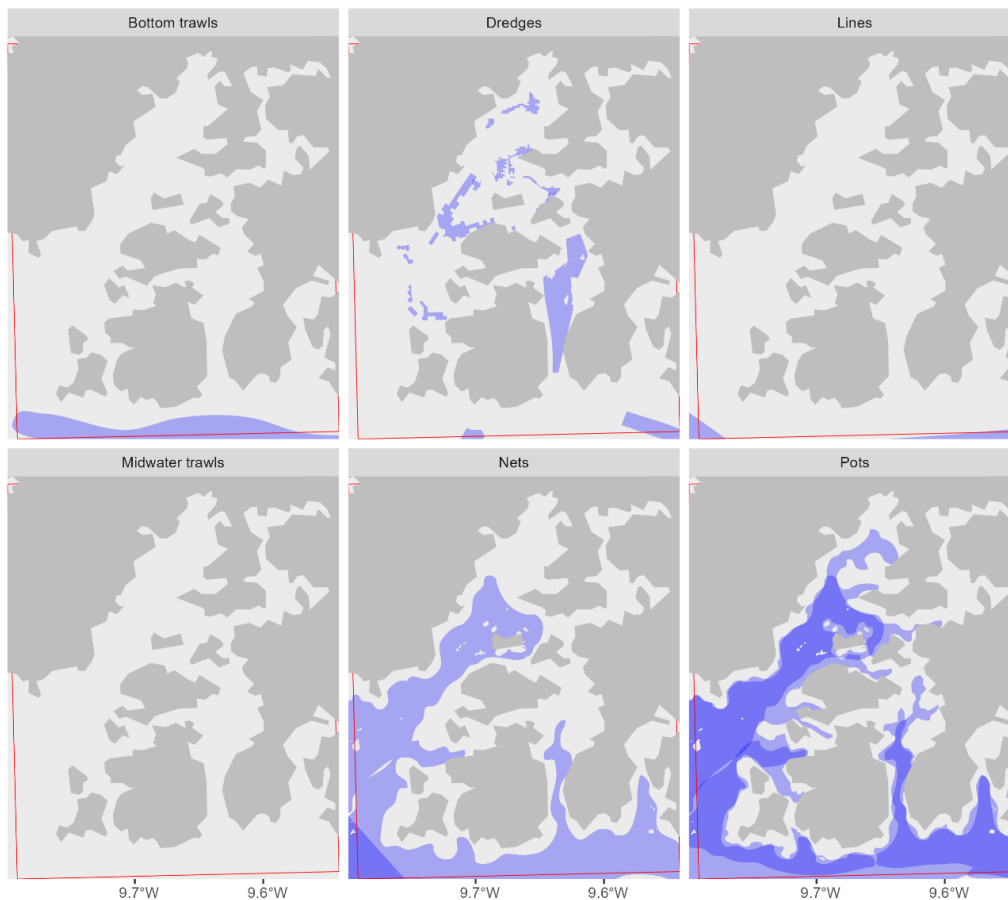


Figure 1. Inshore fishing grounds (vessels without VMS; this dataset was created in support of the Natura 2000 risk assessment in 2013) depth of shading proportional to fishing intensity. The Kilkieran Bay area is outlined by the red box.

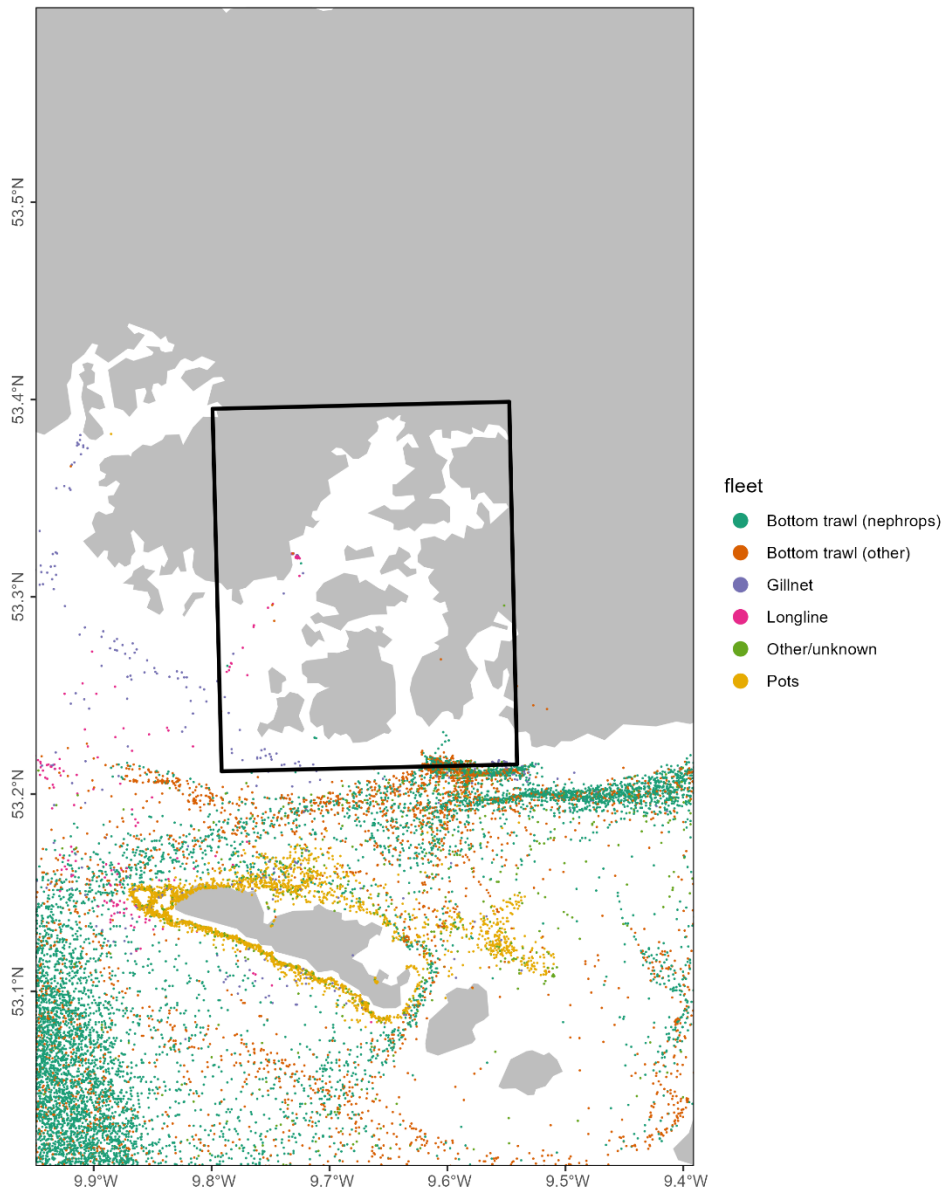


Figure 2. VMS locations of vessels moving at speeds consistent with fishing activity for the period 2020-24. Vessels of $\geq 12\text{m}$ only.