

Draft South Coast Designated Maritime Area Plan for Offshore Renewable Energy





Draft SC-DMAP



This is a **Draft**

6-Week Consultation

Plan not a project



Policy Context



- Offshore Renewable Energy (ORE) critical enabler of Ireland's decarbonisation and energy security
- National Marine Planning Framework, 2021
- Maritime Area Planning Act, 2021
- ORE Plan Led-Regime, 2023
- Draft South Coast DMAP, 2024

South Coast DMAP Proposal

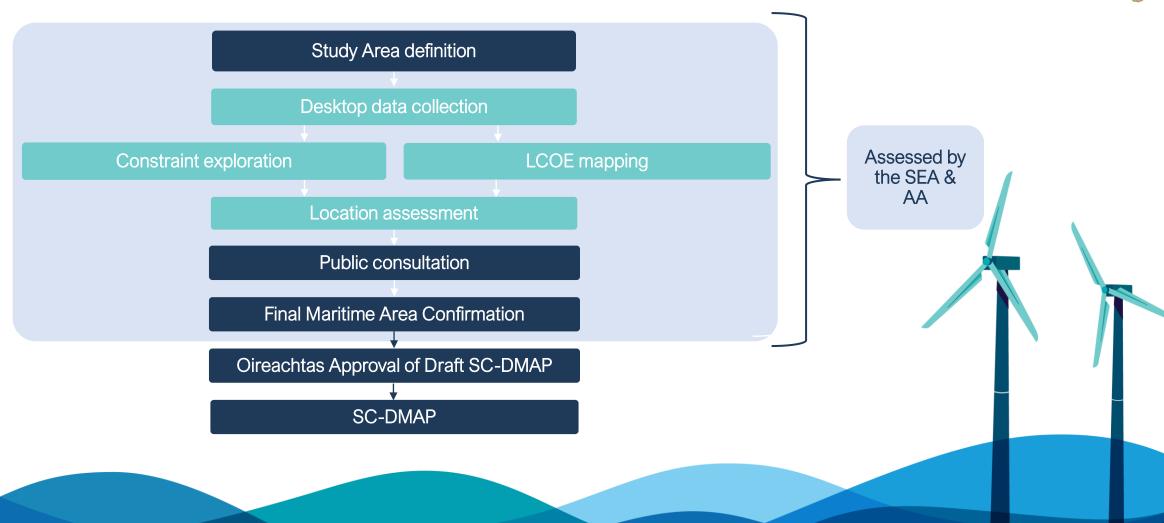


- DMAP Proposal July 2023 Study Area
- To identify Maritime areas for Fixed Offshore Wind
 - 900 MW Project for development by 2030
 - Post 2030 development areas
- Refinement on foot of:
 - —Public Engagement: Aug-Oct 23
 - Environmental & Technical Analysis
 - -SEA and AA



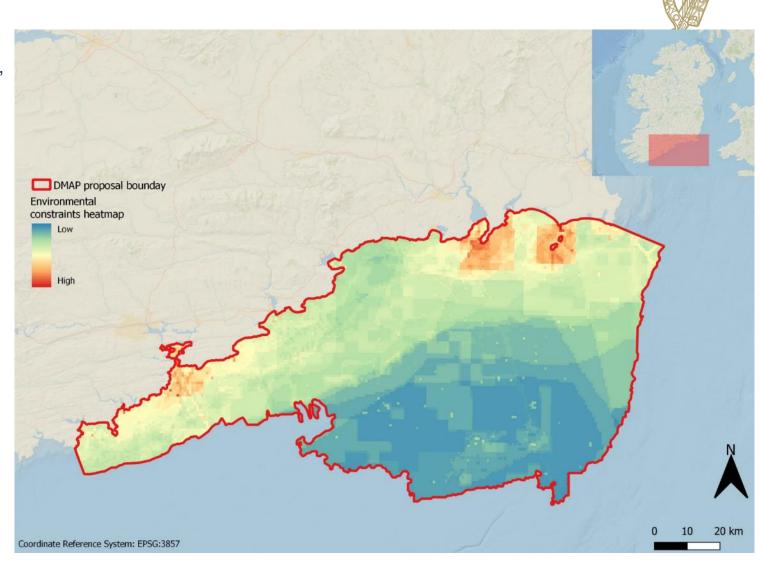
Maritime Area Identification Process





Constraint exploration

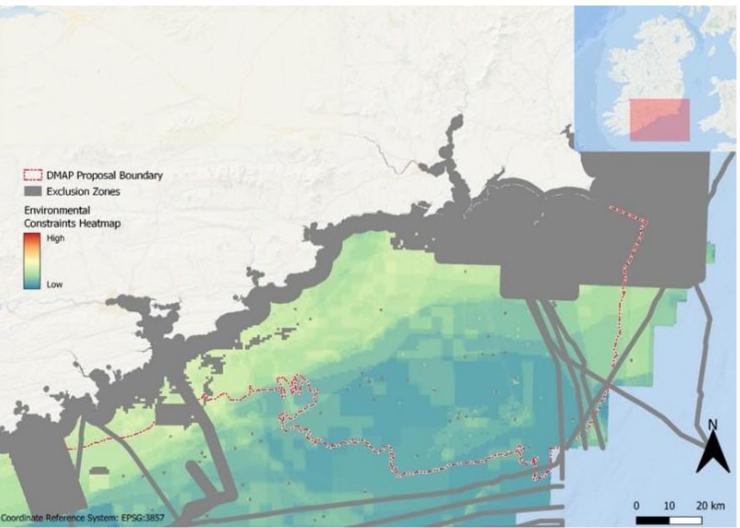
- Ecosystem-based approach, including analysis of social, economic, biodiversity data
- Spatial data for environmental and technical attributes potentially constraining ORE location was collected
 - 17 Attribute categories
 - Over 200 Environmental Layers
 - 21 Technical Layers
- Environmental constraints assessed through analysis and consideration of data layers including re:
 - Commercial fisheries
 - Aquaculture
 - Fish/Shellfish (spawning/nursery grounds)
- DMAP Area broken down in 10mx10m cells to highlight areas of greatest environmental constraint



Step 1: Constraint exploration



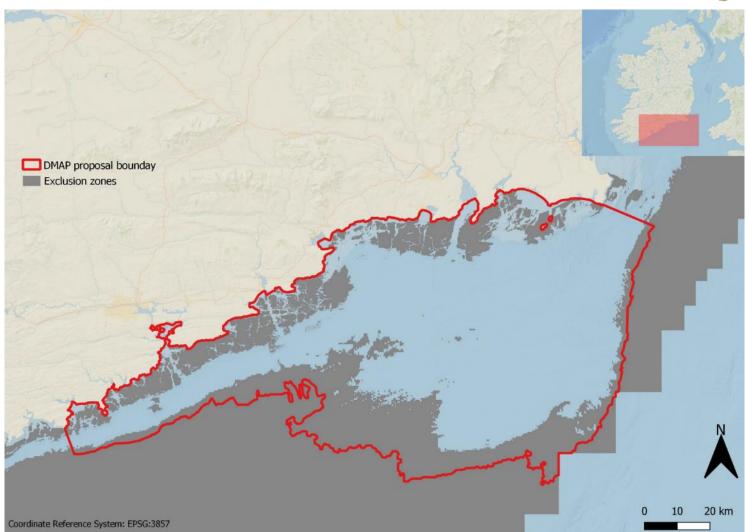
 Areas where the consolidated rating is within c.60% of the maximum cumulative rating are excluded from consideration



Step 2: Constraint exploration



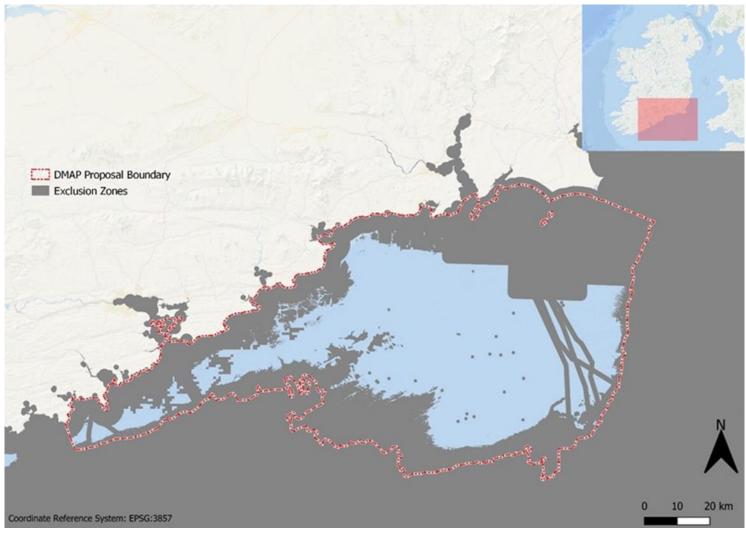
- Technical constraints were then considered
- Areas where surface bedrock is identified were excluded
- Areas where the sea depth is>75 m were excluded



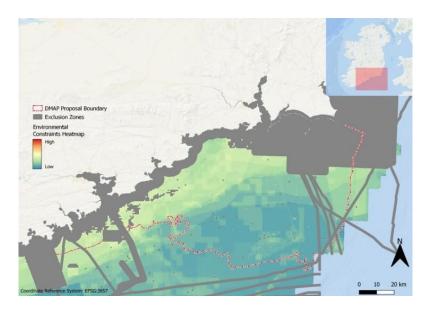
Step 3: Constraint exploration



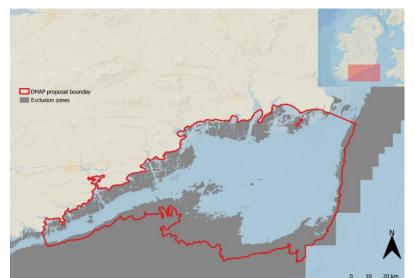
 Environmental and technical constraints were consolidated into a combined exclusion map



Step 1

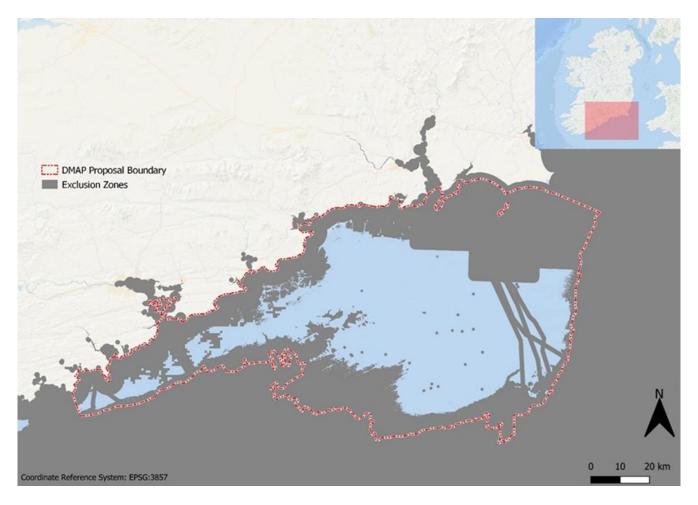


Step 2



Step 3

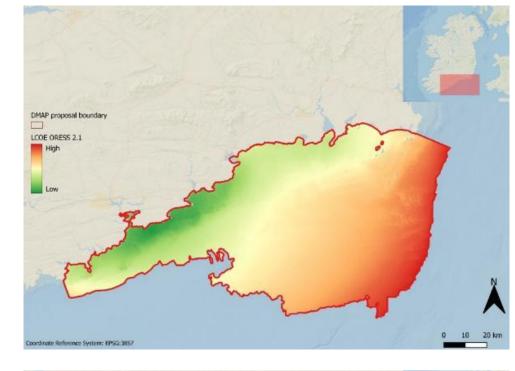


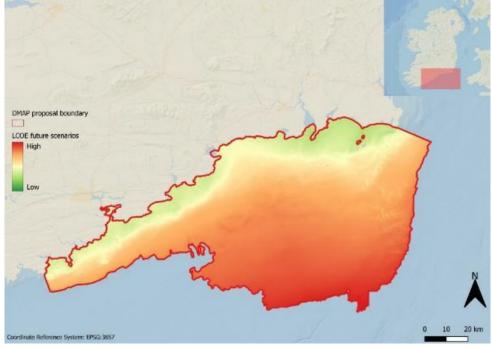


Step 4: Levelised cost of energy mapping

- Economically attractive locations for ORE Development:
 - Sea-Depth
 - Wind-Speed
 - Grid

- Separate LCOE maps for:
 - Maritime Area A
 - Maritime Areas B-D

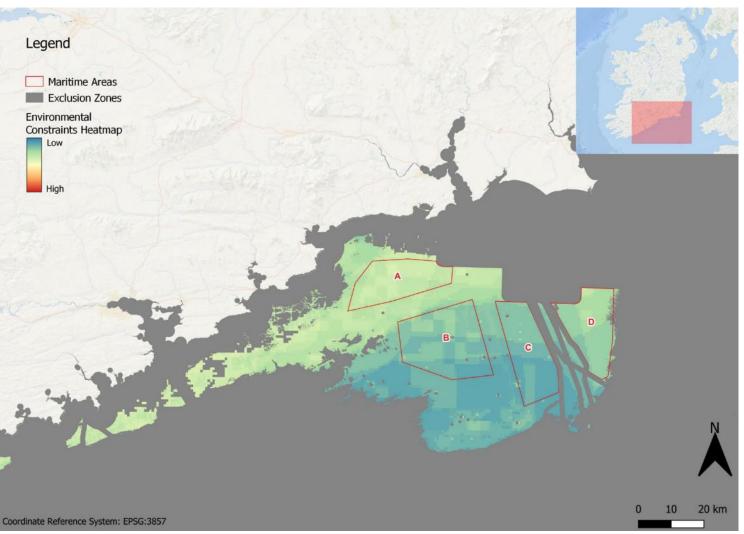




Step 5: Location assessment



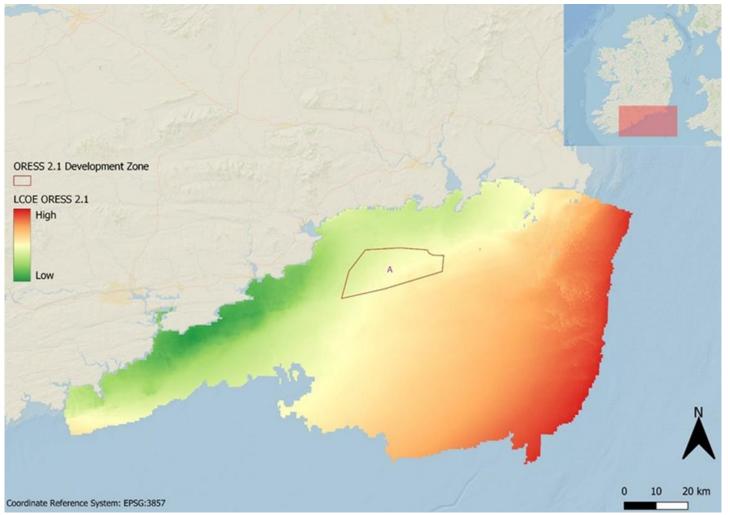
- 4 Maritime Areas identified where there were no exclusions and environmental constraint and LCOE are lowest
- If only LCOE were to be considered, then the maritime areas would likely be much closer to shore, where the costs of project development are lower



Maritime Area A: Tonn Nua

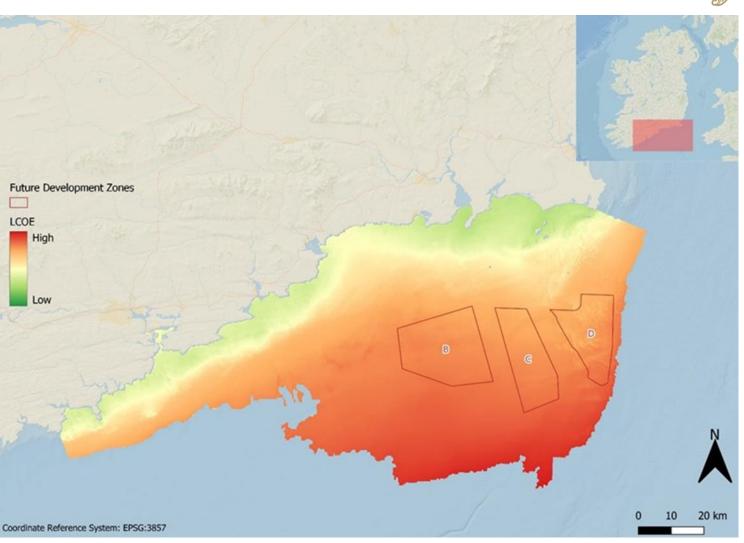
- 900 MW Project by ORESS Tonn Nua Winner
 - Aiming for 2030 Deployment
 - 60 x 15 MW Turbines (indicative)
 - DMAP is a Plan not a Project
- 313 km²
 - Spatial Flexibility for 900MW project c.65%
- Closest Distance to shore
 - 12.2 km Western Boundary
 - 12.4 km Northern Boundary
- Mean water depth 57 m
 - 48-69m range
 - Deep Water Development
- Not located in area of lowest LCOE
- Annual Community Benefit Fund over €5m
 - c.€125-174m over project lifetime





Maritime Areas B-D

- Post 2030 Deployments
 - Grid and Non-Grid Connected Projects
 - Differences to Maritime Area A
 - Very deep water; Constrained supply chain; highest cost; delayed deployment
- Maritime Area B: Lí Ban
 - 486 km²
 - Distance to shore: 29 km
 - Mean water depth 71 m
- Maritime Area C: Manannán
 - 342 km²
 - Distance to shore: 27 km
 - Mean water depth 69m
- Maritime Area D: Danu
 - 304 km²
 - Distance to shore: 27 km
 - Mean water depth 67 m

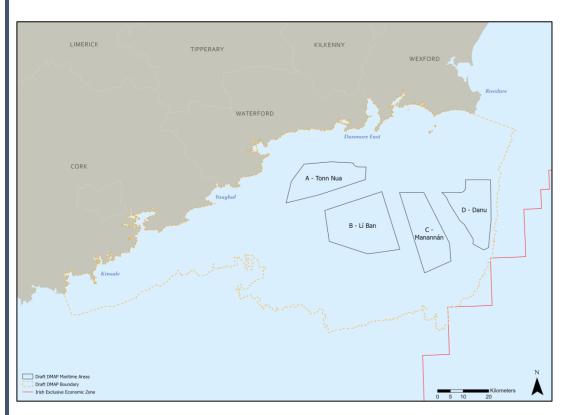


Draft South Coast DMAP ORE



- <u>Draft</u> SC DMAP proposes 4 Maritime Areas for future ORE
- DMAP Policy Objectives for sustainable ORE development:
 - Marine environment and biodiversity protection
 - Coexistence of ORE with other maritime activities

 Policy objectives are in addition to existing policy and statutory obligations, and project level EIA and AA



DMAP Governance / Monitoring



Led by DECC

- Input from expert bodies/stakeholders
- Collaborative engagement with key stakeholders

Implementation Board

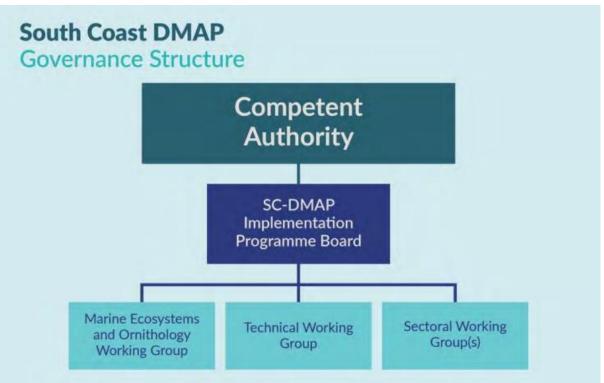
- ➤ Implement SEA Monitoring Programme
- Determine Scope of Regional Surveys
- Convene 'Collaborative Forum'
- Facilitate GIS depository

Marine Ecosystems and Ornithology WG

- Advise on Regional Surveys
- Advise on monitoring/implementation of DMAP
- Membership to include expert bodies

Research and Monitoring Programme

- > Assess impacts of ORE on marine ecosystems
- ➤ Led by Marine Institute

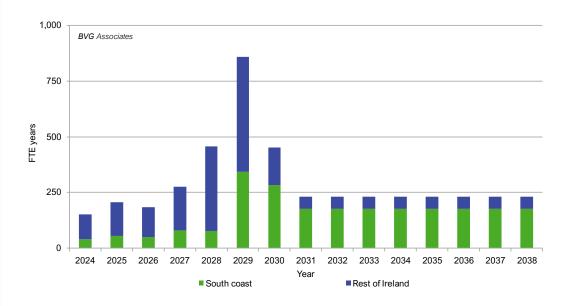


Tonn Nua 900 MW Estimated Economic Impact

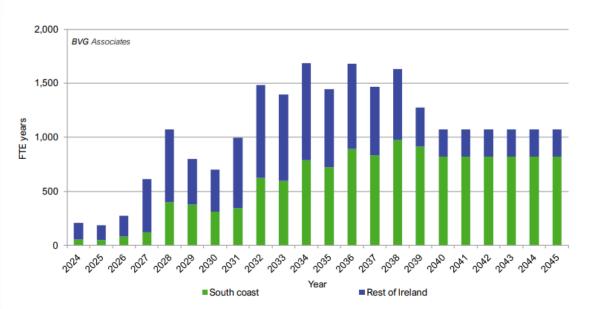
- €940mn GVA and 10,400 FTE years in IE
- €620mn GVA and 6,900 FTE years in South Coast
- South Coast capture >65% economic benefits

DMAP 5GW Pipeline Estimated Economic Impact

- €4.4bn GVA and 49,000 FTE years in IE
- €2.9bn GVA and 32,200 FTE years in South Coast
- Direct regional jobs c.800 from 2036 onwards
- South Coast captures >65% economic benefits



Employment impacts of a 900MW South Coast DMAP project (above) and potential 5 GW pipeline (below)



Fishing/Aquaculture Co-Existence Policy Objectives



- In combination with identification of 4 Maritime Areas and spatial flexibility, policy objectives will:
 - Maximise Opportunities for Co-existence
 - Avoid, Minimise, Mitigate Impacts of ORE development on commercial fishers/aquaculture
 - Policies as direct response to fishers engagement
 - Developed through dialogue with experienced UK fishers/POs
 - Workshops held with Fishing Industry and ORE Industry before Draft DMAP publication
- 1. Seafood-ORE Engagement Protocol / Mandatory FLOs
- 2. No Mandatory Exclusions
- 3. FMMS/AMMS management and mitigation measures for each impacted commercial fishery
- 4. Cable Management Plan Burial / Protection
- Ireland is the 1st Country to put comprehensive fishing co-existence policies on statutory footing
- Research and Monitoring Programme led by MI
 - Impacts of ORE and Marine Ecosystems incl. fisheries

Next Steps

- May June: Statutory 6 Week Statutory Public Consultation in person events across Cork, Waterford & Wexford
- Public in person events:
 - Cork: 4 events on 16 May & 6 June
 - Waterford: 6 events on 15 May & 30 May & 5 June
 - Wexford: 4 events on 22 & 28 May
- Full list of events at gov.ie/southcoastdmap
- 2024: Update Draft DMAP & finalise SEA & AA processes
- 2024: Oireachtas Approval Sought for Draft DMAP, contingent on consultation outcome and post consultation DMAP amendments



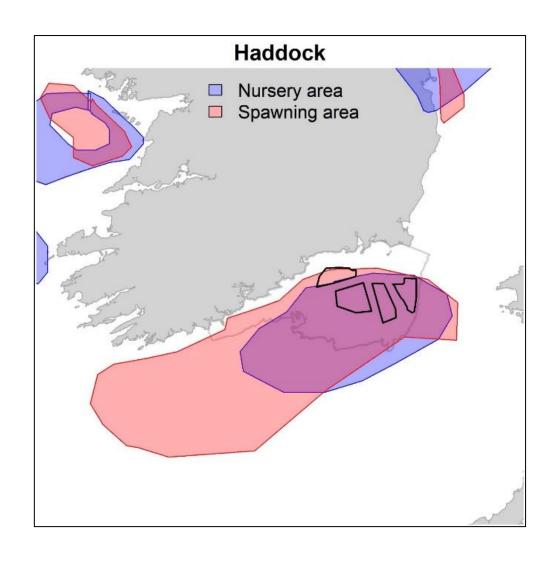


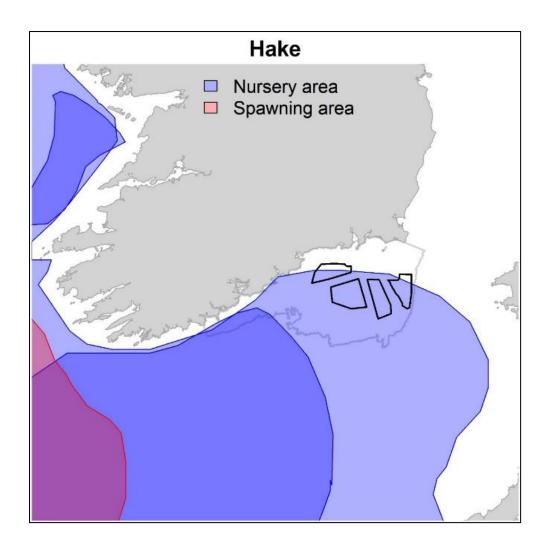
Thank you for listening

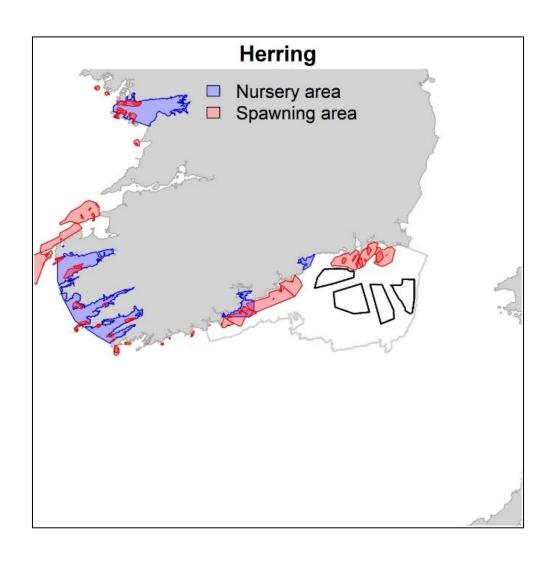
Slides 22-26 highlight the overlap between the draft DMAP 4 Maritime Areas with spawning and nursery grounds of commercially important species Hake, Mackerel, Horse Mackerel, Cod, Herring, Haddock, Megrim, Nephrops, White Bellied Anglerfish and Whiting.

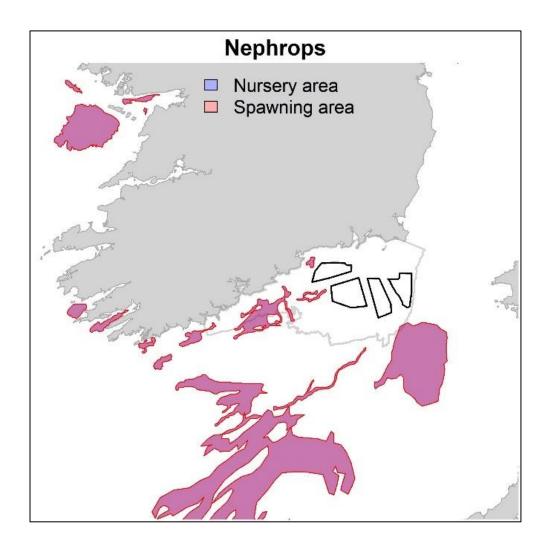
Data was collected by the Marine Institute in 2009.

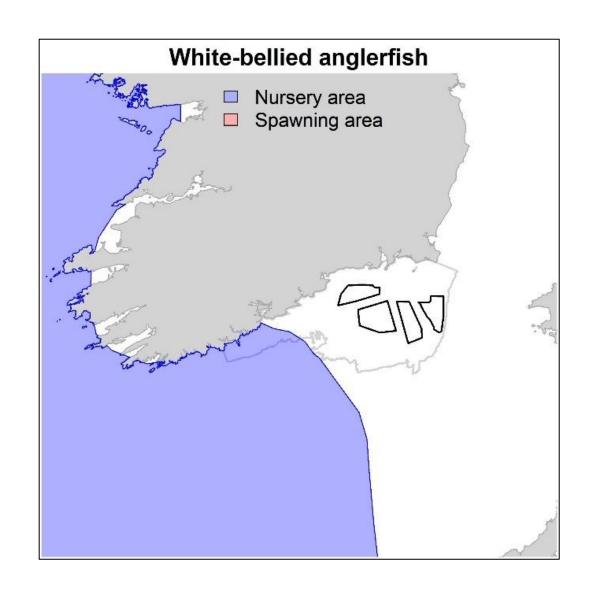
The MI notes that that with the exception of Nephrops and Herring, which both require very specific sediment types, the boundaries of these grounds are subject to change over time and may be based on relatively sparse data.

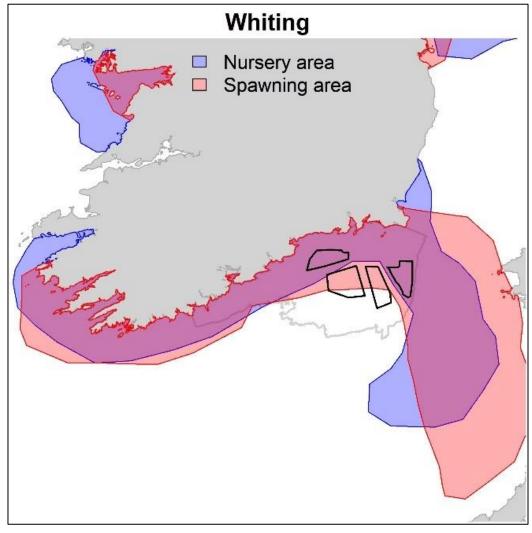


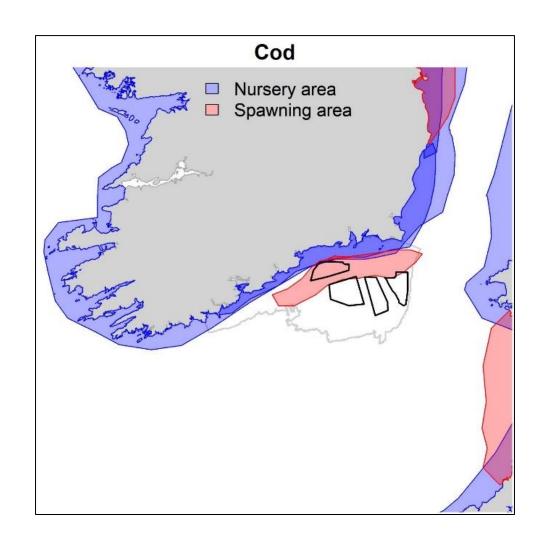


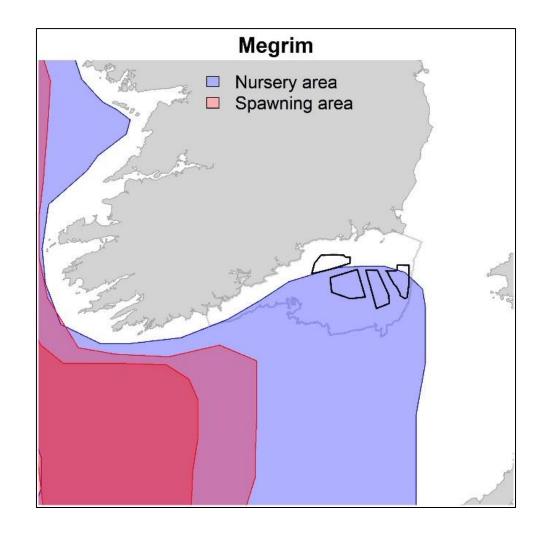


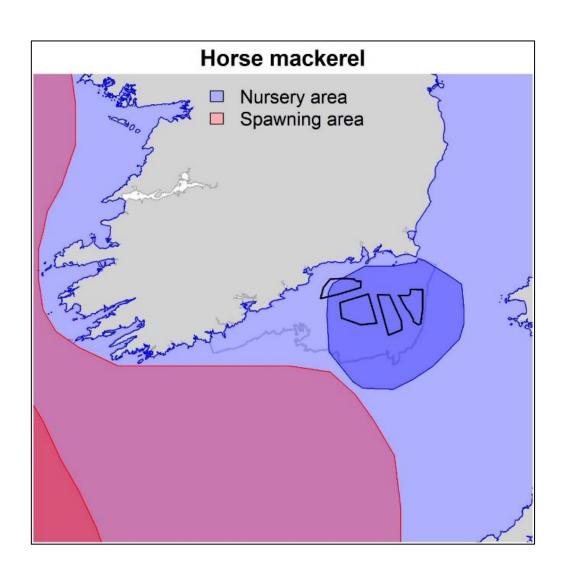


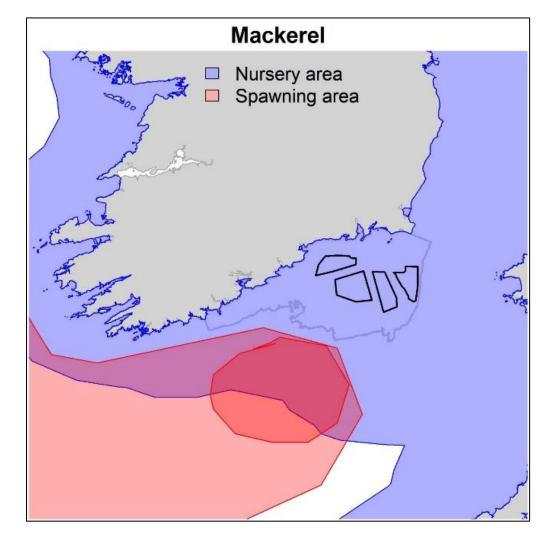








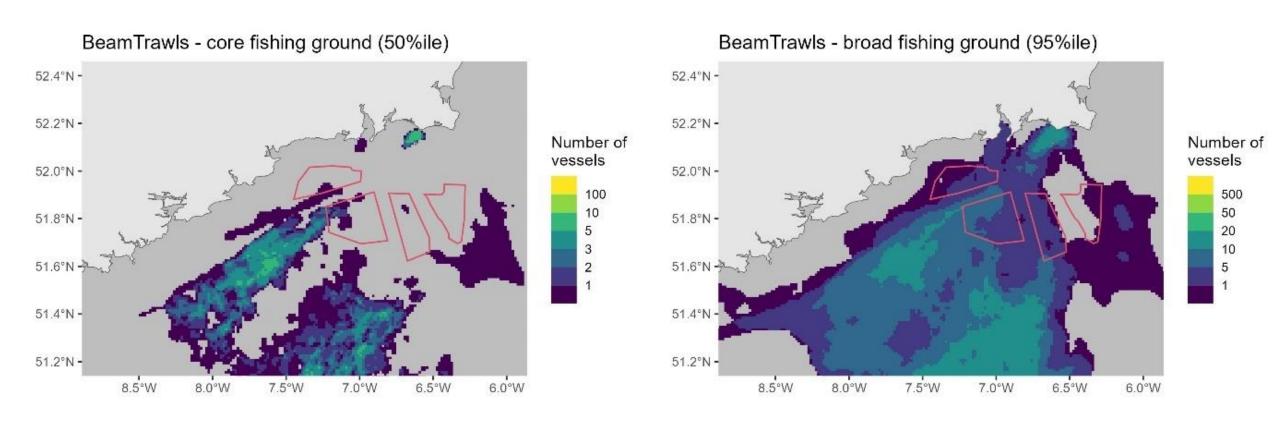




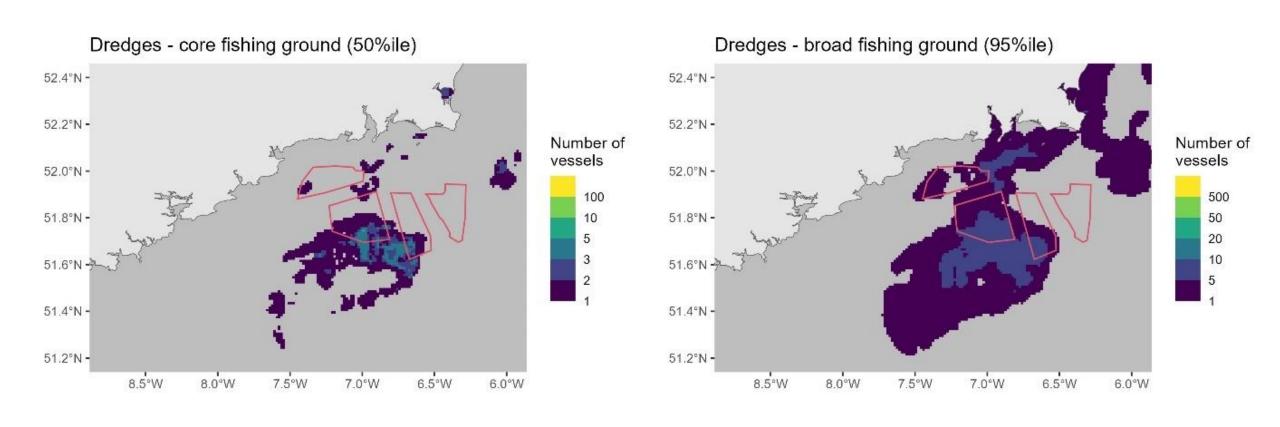
Overlaps between 4 Maritime Areas and Commercial Fisheries

Slides 28-34 illustrate: "how many Irish vessels over 12m are active in the waters around Ireland during the period 2018-22. In order to quantify this, the fishing effort for each individual Irish vessel was mapped and the core fishing area of each vessel was identified as the area where the top 50% of fishing effort took place. A broader fishing area was also identified; this was defined as the area where the top 95% of fishing effort took place. These areas were summed across all vessels to create maps of the number of vessels active at each location for each gear type over the period 2018-22 (vessels >12m only). If a vessel used more than one gear, its contribution to the total number of vessels was calculated in proportion to the fishing effort used for each gear by that vessel. For example, a fishing area of a vessel that splits its time equally to two gears would count as half a vessel for each gear." *Marine Institute*

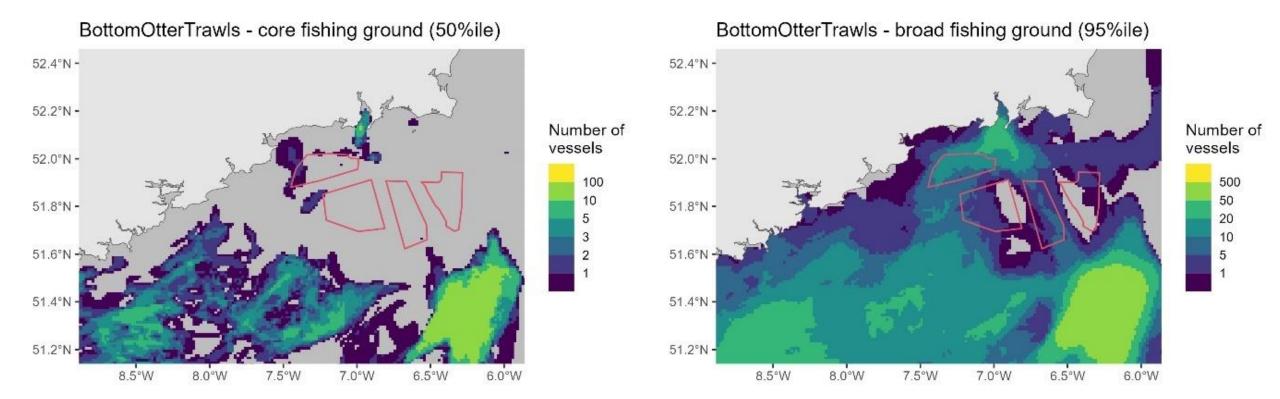
Beam Trawls Overlaps



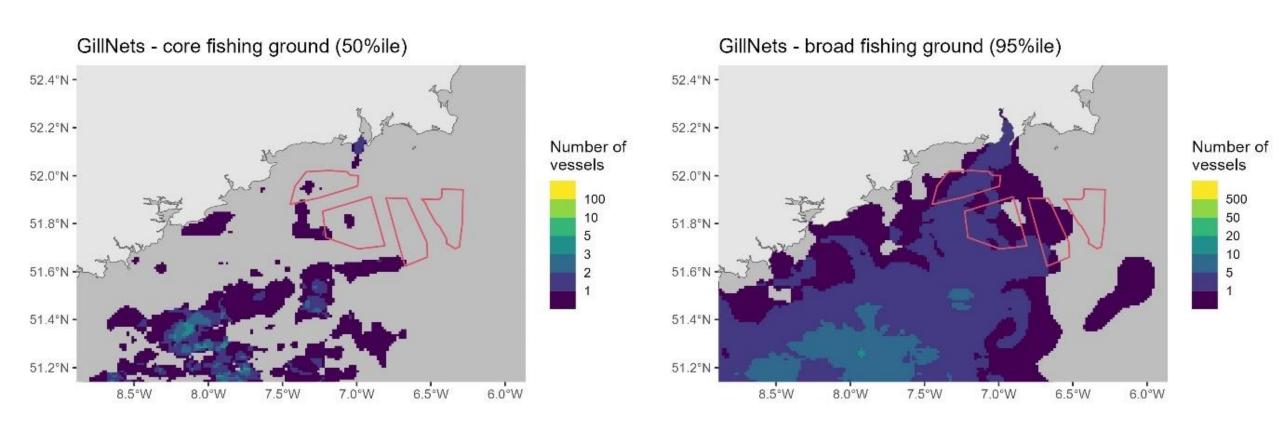
Dredges Overlap



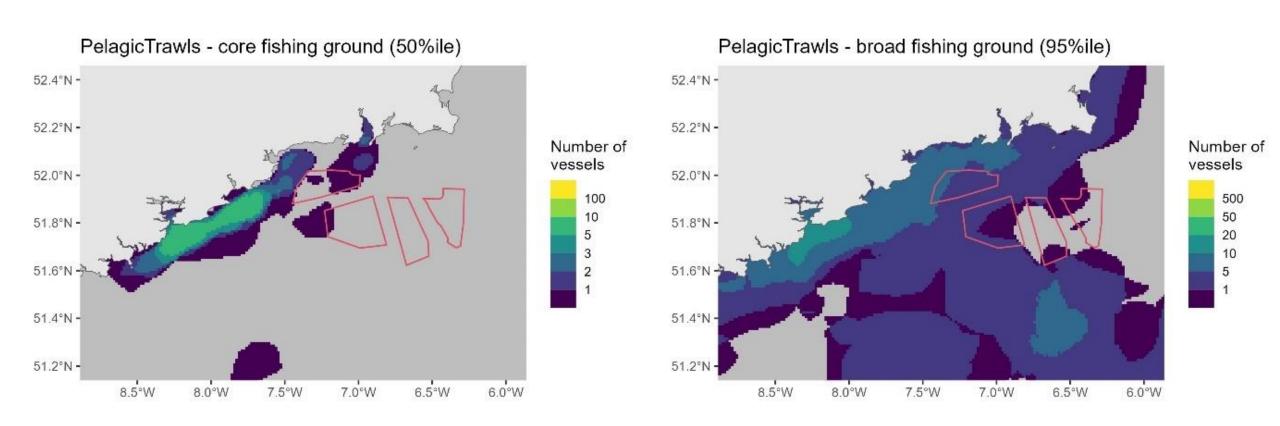
Bottom Otter Trawls Overlap



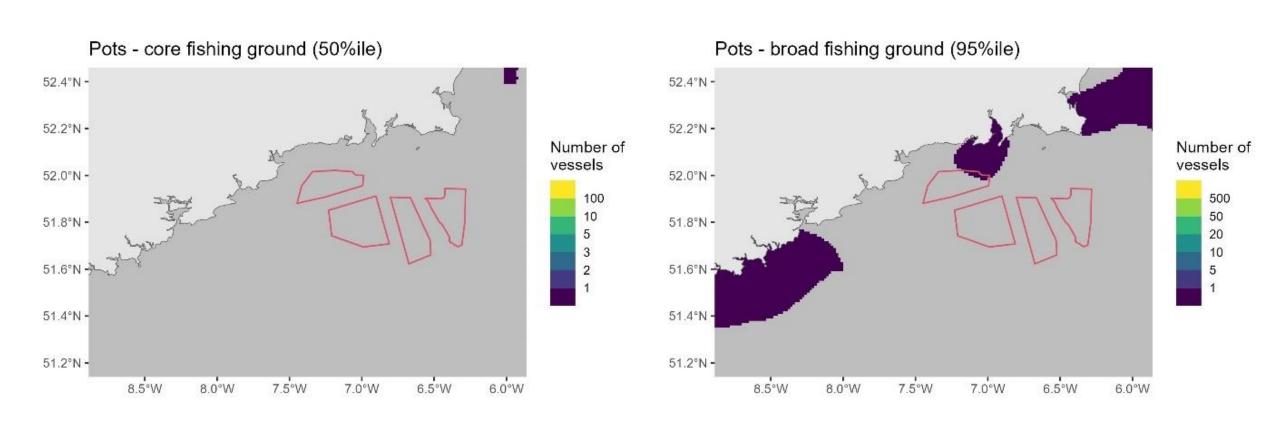
GillNets Overlap



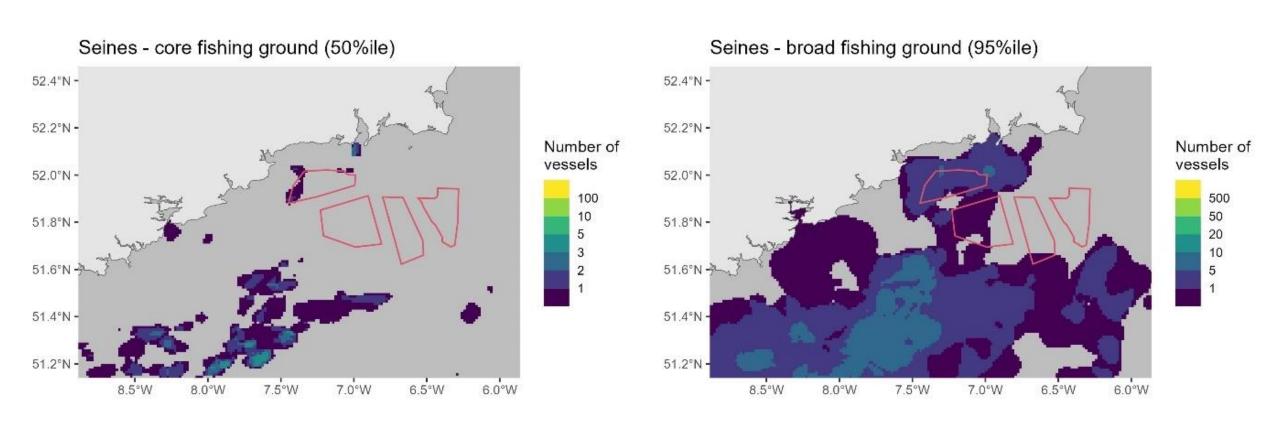
Pelagic Trawls Overlap



Pots Overlap



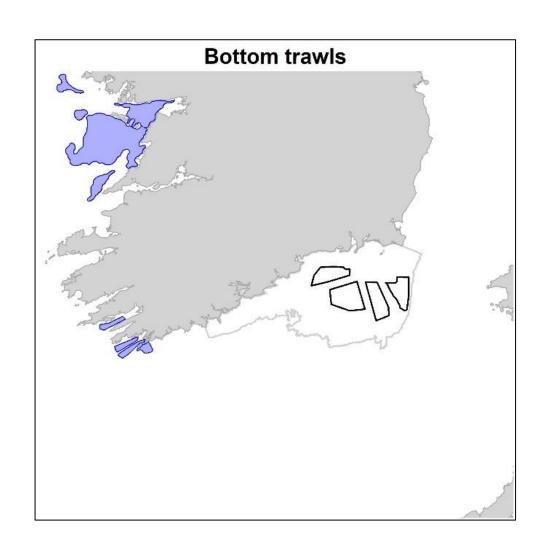
Seines Overlap

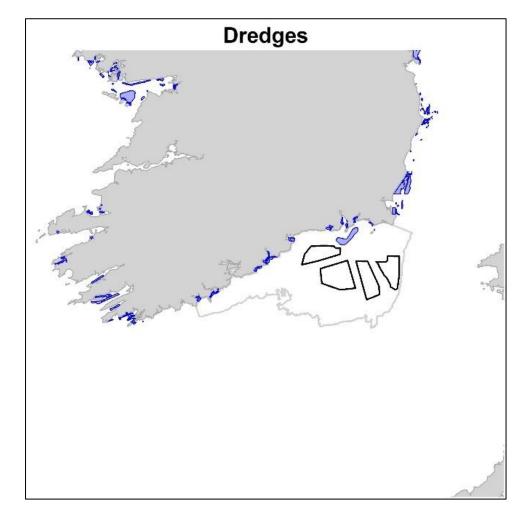


Inshore Fisheries Overlaps

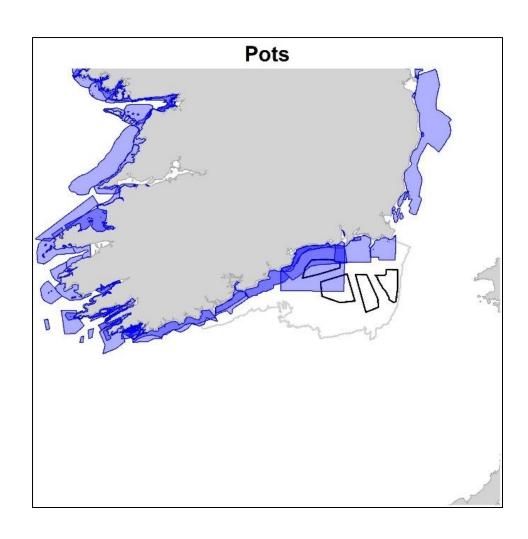
Slides 36-38 highlight overlaps between the draft DMAP 4 Maritime Areas with the fishing activity by inshore vessels, based on information compiled by the Marine Institute to support the 2013 Natura 2000 assessment

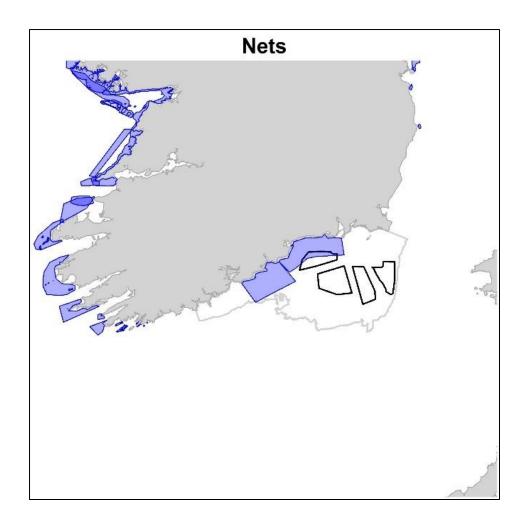
Inshore Fisheries Bottom Trawls and Dredges Overlaps





Inshore Fisheries Pots and Nets Overlaps





Inshore Fisheries Lines and Midwater Trawls Overlaps

