

# SITE SUMMARY DOCUMENT

## Carlingford Lough Proposed Marine Conservation Zone (pMCZ)

Sea-pen (*Virgularia mirabilis*) © Claire Goodwin



# Carlingford Lough

## Proposed MCZ

Carlingford Lough is a narrow and shallow sea lough that lies on the east coast of Ireland located at the border of Northern Ireland and the Republic of Ireland (Figure 1). The proposed MCZ (pMCZ) is located off the northern shore and north of the navigable channel in the inner part of the Lough.

Carlingford Lough has an extensive intertidal area of sand and mudflats that provide key feeding grounds for overwintering birds. The pMCZ consists of a shallow subtidal area of fine mud encompassing 3.23km<sup>2</sup>. The pMCZ has been proposed as it supports the habitat Subtidal (sublittoral) mud containing Sea-pen and white sea slug communities (Figure 2 and 3). The Sea-pen (*Virgularia mirabilis*) and the white sea slug (*Philine aperta*) both occur in high densities and this feature is thought to be a temporal variant of other sublittoral cohesive mud and sandy mud communities. This is a unique habitat in terms of the size and density of the *V. mirabilis* in Northern Ireland.



Figure 1 Location of Carlingford Lough pMCZ

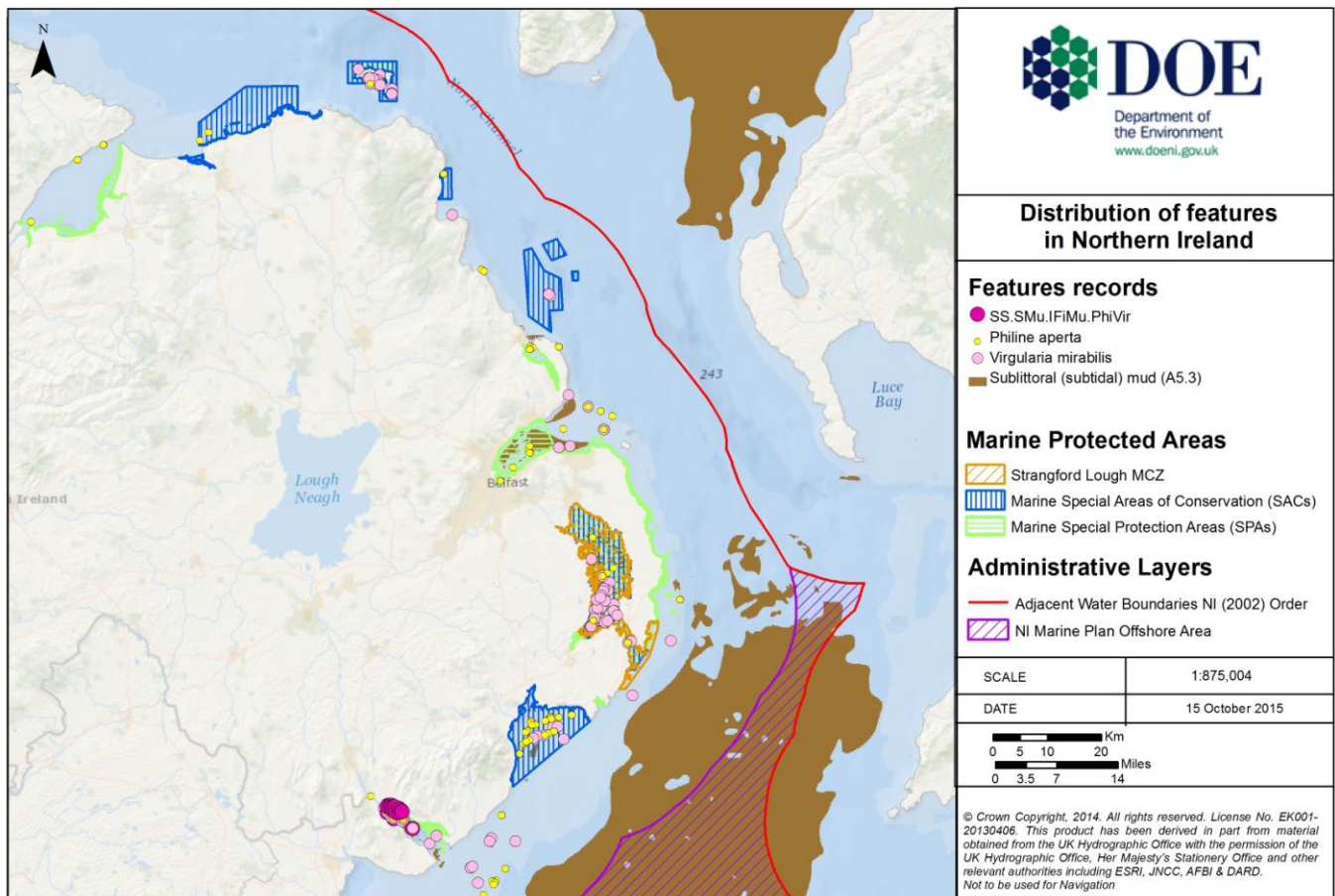
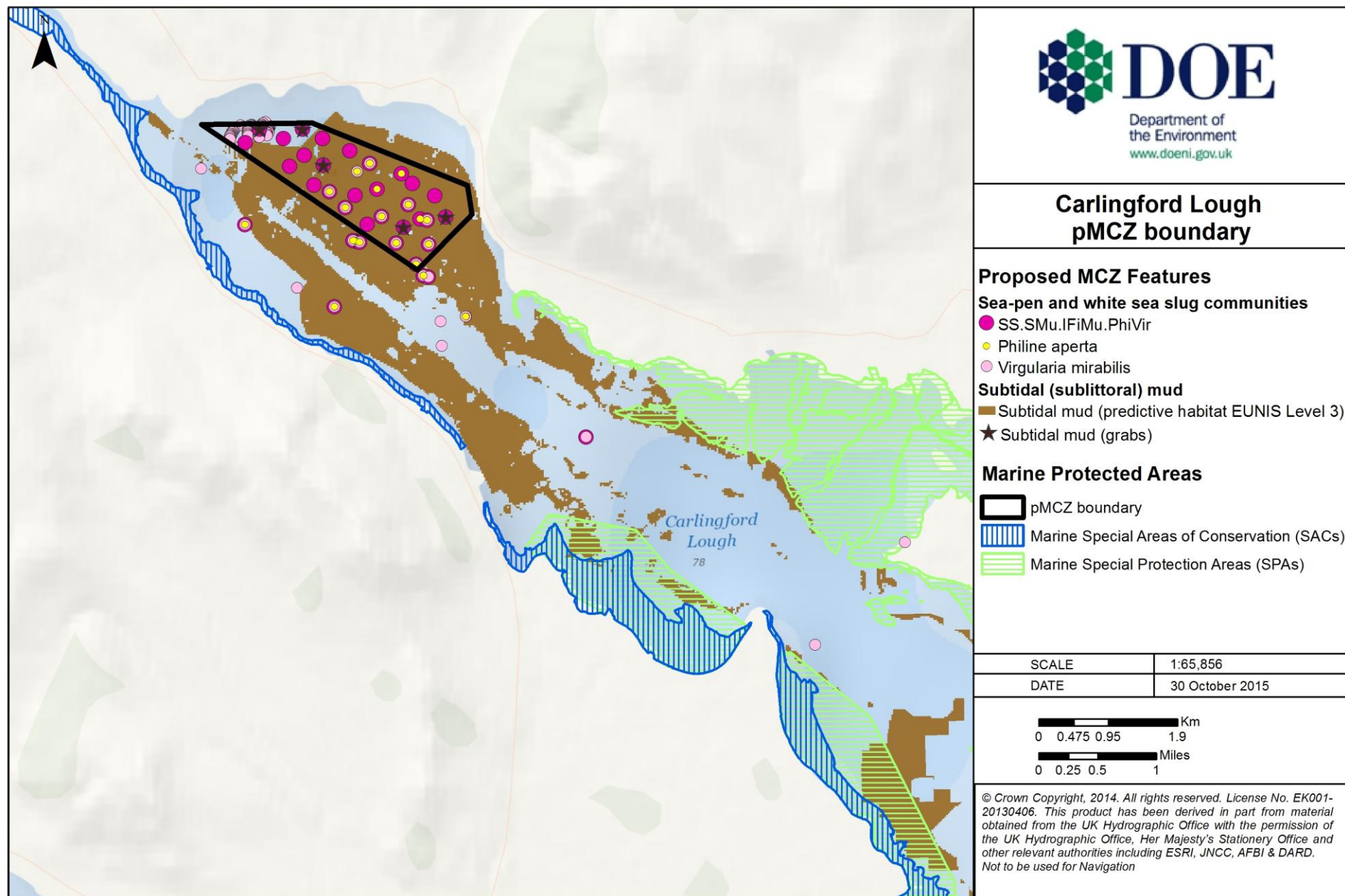


Figure 2 Location of Subtidal (sublittoral) mud and Sea-pen and white sea slug communities in Northern Ireland waters



**Figure 3** Location of the proposed boundary of Carlingford Lough pMCZ

Location (Centroid): 54° 5.291' N -6° 12.893' W

Area: 3.230km<sup>2</sup>



High densities of Sea-pen (*Virgularia mirabilis*) on Subtidal (sublittoral) mud in Carlingford Lough

## Proposed MCZ Features

### Habitats:

- Subtidal (sublittoral) mud:
  - Sea-pen and white sea slug communities(Biotope:[SS.SMu.IFiMu.PhiVir](#))

Subtidal (sublittoral) mud habitats generally occur in deep water below 20-30m but may occur in shallower sea lough waters such as Carlingford Lough. As this site is sheltered from wave action, these soft mud communities are present in shallow depths (<15m).

High densities of the white sea slug (*P. aperta*) usually characterise this biotope; however, in Carlingford Lough the pMCZ area also contains one of the densest beds of the sea-pens (*V. Mirabilis*) recorded in Northern Ireland.

Sea-pen and white sea slug communities are a Northern Ireland variant of the emergent and burrowing megafauna communities. Apart from occasional Norway lobster (*Nephrops norvegicus*), burrowing crustacean megafauna are mainly absent from this habitat in Carlingford Lough. Sea-pen is a Priority species in Northern Ireland.

Historical records of Subtidal (sublittoral) mud with Sea-pen and white sea slug communities are reported from 1968. This has been supplemented with additional surveys conducted as part of this site designation process. The data sources include:

1. Northern Ireland Sublittoral Survey (NISS) (1982-1985)
2. Sublittoral Survey Northern Ireland (SSNI) (2006-2012)
3. AFBI Carlingford Lough Survey (2012)
4. DOE Carlingford Lough pMCZ spyball survey 2015

## Management options in the network

Management options include avoiding the expansion of existing aquaculture farms or development of new ones within the pMCZ, preventing anchoring within the pMCZ and the disposal of dredge material where they are likely to impact the pMCZ features.

# Further Information

For further information on possible Marine Conservation Zones in the Northern Ireland Inshore Region please contact:

[MarineDivision.InfoRequests@doeni.gov.uk](mailto:MarineDivision.InfoRequests@doeni.gov.uk)

Additional information on the 'Carlingford Lough pMCZ' includes:

- Guidance on selection and designation of Marine Conservation Zones (MCZs) in the Northern Ireland Inshore Region
- Justification report for selection of proposed Marine Conservation Zone (pMCZ) features
- Guidance on the development of Conservation Objectives and potential Management Options
- Conservation Objectives and potential Management Options for Carlingford Lough proposed Marine Conservation Zone (pMCZ)
- Assessment against the Selection Guidelines for Carlingford Lough proposed Marine Conservation Zone (pMCZ)
- Data Confidence Assessment for Carlingford Lough proposed Marine Conservation Zone (pMCZ)

All documents are available from our website:

[www.doeni.gov.uk](http://www.doeni.gov.uk)



1. Subtidal mud with *Amphiura sp.*, 2. Sea-pen (*Virgularia mirabilis*), 3. Sea cucumber (*Ocnus planci*) and 4. White sea slug (*Philine aperta*)





Department of  
the Environment  
[www.doeni.gov.uk](http://www.doeni.gov.uk)

Department of the Environment  
Marine Division  
2<sup>nd</sup> Floor  
Klondyke Building  
Gasworks Business Park  
Belfast BT2 7JA

Telephone: 028 90569262

Email:  
[MarineDivision.InfoRequests@doeni.gov.uk](mailto:MarineDivision.InfoRequests@doeni.gov.uk)

Photos represent Priority Marine Features  
found throughout the Northern Ireland  
Inshore Region

