

National Parks and Wildlife Service

Conservation Objectives Series

Lough Hyne Nature Reserve and Environs SAC
000097



An Roinn
Ealaíon, Oidhreachta agus Gaeltachta

Department of
Arts, Heritage and the Gaeltacht



**National Parks and Wildlife Service,
Department of Arts, Heritage and the Gaeltacht,
7 Ely Place, Dublin 2, Ireland.
Web: www.npws.ie
E-mail: nature.conservation@ahg.gov.ie**

Citation:

**NPWS (201) Conservation Objectives: Lough Hyne Nature Reserve and
Environs SAC 000097. Version 1. National Parks and Wildlife Service,
Department of Arts, Heritage and the Gaeltacht.**

**Series Editor: Rebecca Jeffrey
ISSN 2009-4086**

Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

Qualifying Interests

** indicates a priority habitat under the Habitats Directive*

000097	Lough Hyne Nature Reserve and Environs SAC
1160	Large shallow inlets and bays
1170	Reefs
8330	Submerged or partially submerged sea caves

Please note that this SAC overlaps with Sheep's Head to Toe Head SPA (004156). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate.

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

Year :	2007
Title :	Surveys of sensitive subtidal benthic communities
Author :	MERC
Series :	Unpublished report to NPWS
<hr/>	
Year :	2014
Title :	Lough Hyne Nature Reserve and Environs SAC (site code: 97) Conservation objectives supporting document- marine habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document

Other References

Year :	1997
Title :	The BioMar biotope viewer: a guide to marine habitats, fauna and flora in Britain and Ireland
Author :	Picton, B.E.; Costello, M.J.
Series :	Environmental Science Unit, Trinity College Dublin
<hr/>	
Year :	2012
Title :	Survey of Irish sea caves
Author :	MERC
Series :	Unpublished report to the Marine Institute and NPWS
<hr/>	
Year :	2012
Title :	Intertidal and subtidal reef survey of Lough Hyne Nature Reserve and Environs SAC
Author :	MERC
Series :	Unpublished report to the Marine Institute and NPWS
<hr/>	
Year :	2013
Title :	Soft sediment ecology of Lough Hyne Marine Reserve – spatial and temporal changes
Author :	Broszeit, S.
Series :	PhD thesis, University College Cork

Spatial data sources

Year :	2005
Title :	OSi Discovery series vector data
GIS Operations :	High Water Mark (HWM) polyline feature class converted into polygon feature class; clipped to SAC boundary. EPA WFD transitional waterbody data erased from extent. Expert opinion used as necessary to resolve any issues arising
Used For :	1160 (map 3)
<hr/>	
Year :	Derived 2014
Title :	Coast of Ireland Oblique Imagery Survey 2003
GIS Operations :	Point dataset created from visual inspection of survey
Used For :	8330 (map 4)
<hr/>	
Year :	Interpolated 2014
Title :	1993, 1994 BioMar surveys; 2007 <i>Zostera</i> survey; 2012 reef surveys
GIS Operations :	Polygon feature classes from marine community types base data sub-divided based on interpolation of marine survey data. Expert opinion used as necessary to resolve any issues arising
Used For :	1170, marine community types (maps 4 and 5)
<hr/>	
Year :	2005
Title :	OSi Discovery series vector data
GIS Operations :	High water mark (HWM) and low water mark (LWM) polyline feature classes converted into polygon feature classes and combined; EU Annex I Saltmarsh and Coastal data erased out if present
Used For :	Marine community types base data (map 5)
<hr/>	

1160 Large shallow inlets and bays

To maintain the favourable conservation condition of Large shallow inlets and bays in Lough Hyne Nature Reserve and Environs SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 3	Habitat area was estimated as 265ha using OSi data
Community extent	Hectares	Maintain the extent of the <i>Zostera</i> -dominated community, subject to natural processes	The likely extent of the <i>Zostera</i> -dominated community was derived from a dive survey undertaken in 2007 (MERC, 2007). See marine supporting document for further details
Community structure: shoot density	Shoots per m ²	Conserve the high quality of the <i>Zostera</i> -dominated community, subject to natural processes	Based on diver observation and underwater viewer (MERC, 2007). See marine supporting document for further details
Community distribution	Hectares	Conserve the following community types in a natural condition: Muds to mixed sediment with polychaetes, bivalves and oligochaetes community complex; Intertidal reef community complex; Subtidal reef community complex; <i>Laminaria</i> -dominated community complex; Sea cave community complex. See map 5	Based on doctoral research (Broszeit, 2013) for sediment communities and 1993 and 1994 BioMar surveys (Picton and Costello, 1997) and 2012 reef survey (MERC, 2012) for the reef communities. See marine supporting document for further details

Conservation Objectives for : Lough Hyne Nature Reserve and Environs SAC [000097]

1170 Reefs

To maintain the favourable conservation condition of Reefs in Lough Hyne Nature Reserve and Environs SAC, which is defined by the following list of attributes and targets:

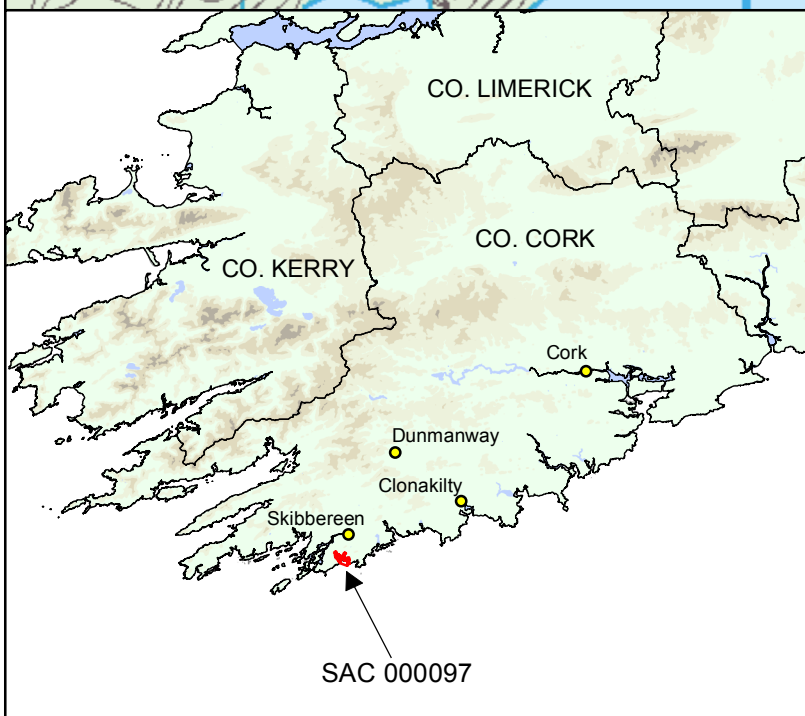
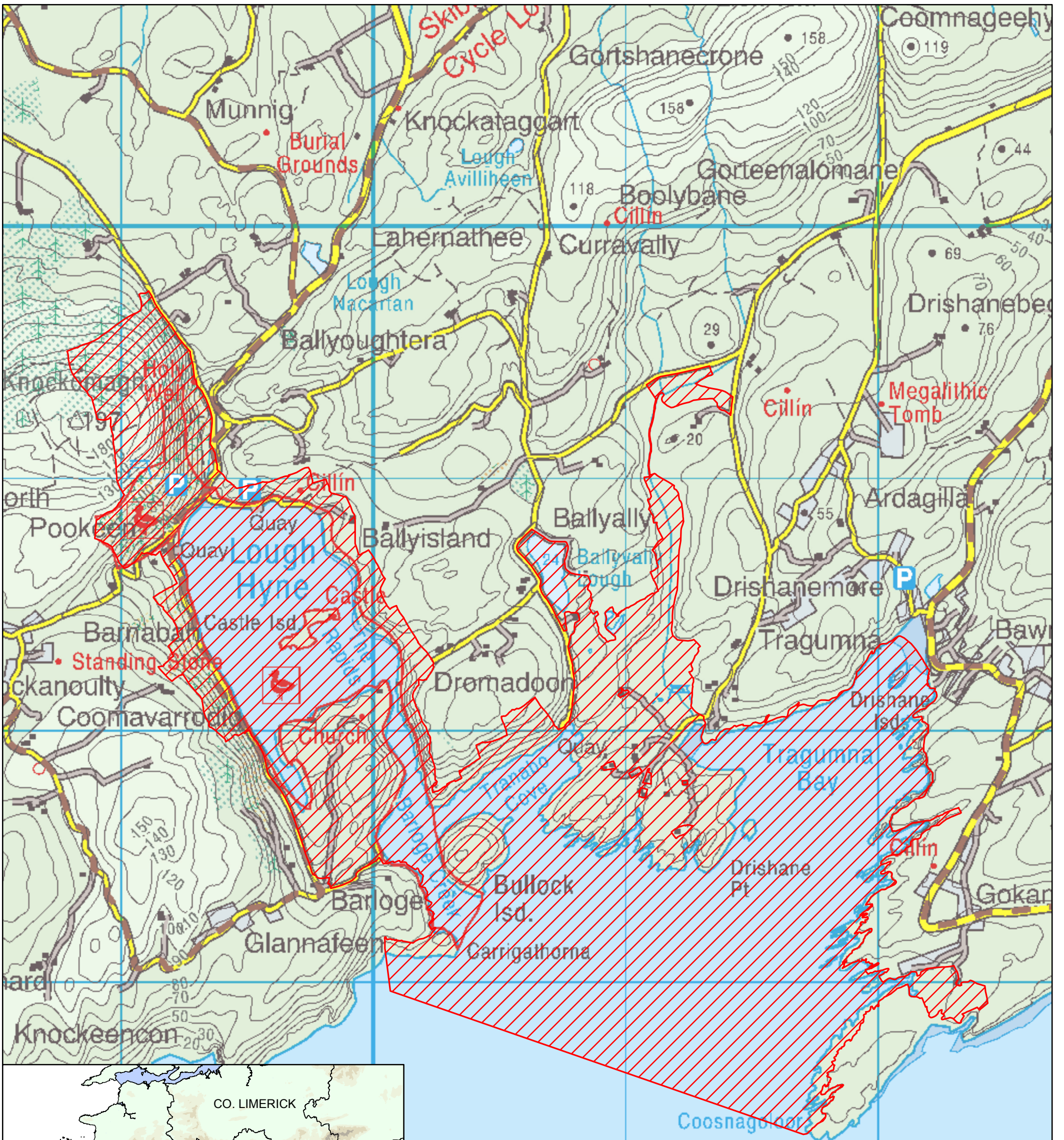
Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 4	Habitat area was estimated as 86ha from a 2012 reef survey (MERC, 2012)
Distribution	Occurrence	The distribution of reefs remains stable, subject to natural processes. See map 4 for mapped distribution	Based on information from 1993 and 1994 BioMar surveys (Picton and Costello, 1997) and a 2012 reef survey (MERC, 2012). See marine supporting document for further details
Community structure	Biological composition	Conserve the following community types in a natural condition: Intertidal reef community complex, Subtidal reef community complex; <i>Laminaria</i> -dominated community complex. See map 5	Reef mapping based on information from 1993 and 1994 BioMar surveys (Picton and Costello, 1997) and 2012 reef survey (MERC, 2012). See marine supporting document for further details

Conservation Objectives for : Lough Hyne Nature Reserve and Environs SAC [000097]


8330 Submerged or partially submerged sea caves

To maintain the favourable conservation condition of Submerged or partially submerged sea caves in Lough Hyne Nature Reserve and Environs SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes	Habitat area of known cave was estimated as 0.05ha from a 2012 survey (MERC, 2012)
Distribution	Occurrence	The distribution of sea caves is stable, subject to natural processes. See map 4 for location of known cave	Sea cave distribution was derived from BioMar surveys (Picton and Costello, 1997) and an oblique aerial survey. The latter only detects the presence of sea caves visible intertidally in the flight path. NB other sea caves may occur within the SAC
Community structure	Biological composition	Conserve the following community type in a natural condition: Sea cave community complex	Based on information from a 2012 survey (MERC, 2012). See marine supporting document for further details
Community structure	Biological composition	Human activities should occur at levels that do not adversely affect the ecology of sea caves in this SAC	See marine supporting document for further details



Legend

 Lough Hyne Nature Reserve and Environs SAC 000097

An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

**MAP 1:
LOUGH HYNE NATURE RESERVE
AND ENVIRONS SAC
CONSERVATION OBJECTIVES
SAC DESIGNATION**

Map to be read in conjunction with the NPWS Conservation Objectives Document.

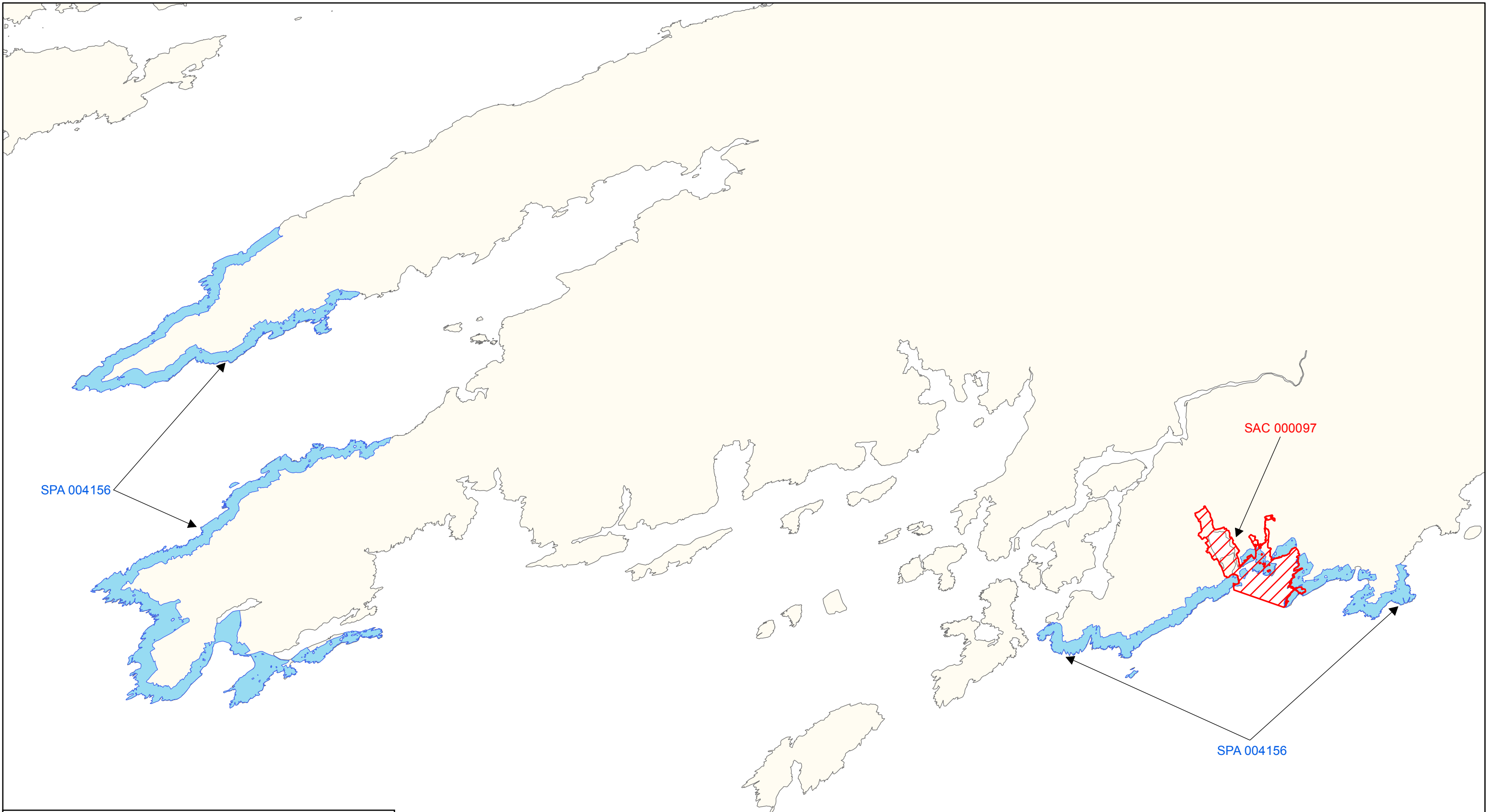
SITE CODE:
SAC 000097; version 3. CO. CORK

0 250 500 m




The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland


Níl sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbheithníthe a déanamh ar theorainneacha na gceantar comharthaíthe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059214. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann


Map Version 1
Date: Aug 2014



Legend

-  Lough Hyne Nature Reserve and Environs SAC 000097
-  Sheep's Head to Toe Head SPA 004156
-  OSi Discovery Series County Boundary

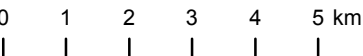


An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

**MAP 2:
LOUGH HYNE NATURE RESERVE
AND ENVIRONS SAC
CONSERVATION OBJECTIVES
ADJOINING / OVERLAPPING
DESIGNATIONS**

Map to be read in conjunction with the NPWS Conservation Objectives Document.

**SITE CODE:
SAC 000097; version 3.
SPA 004156; version 2.02. CO. CORK**



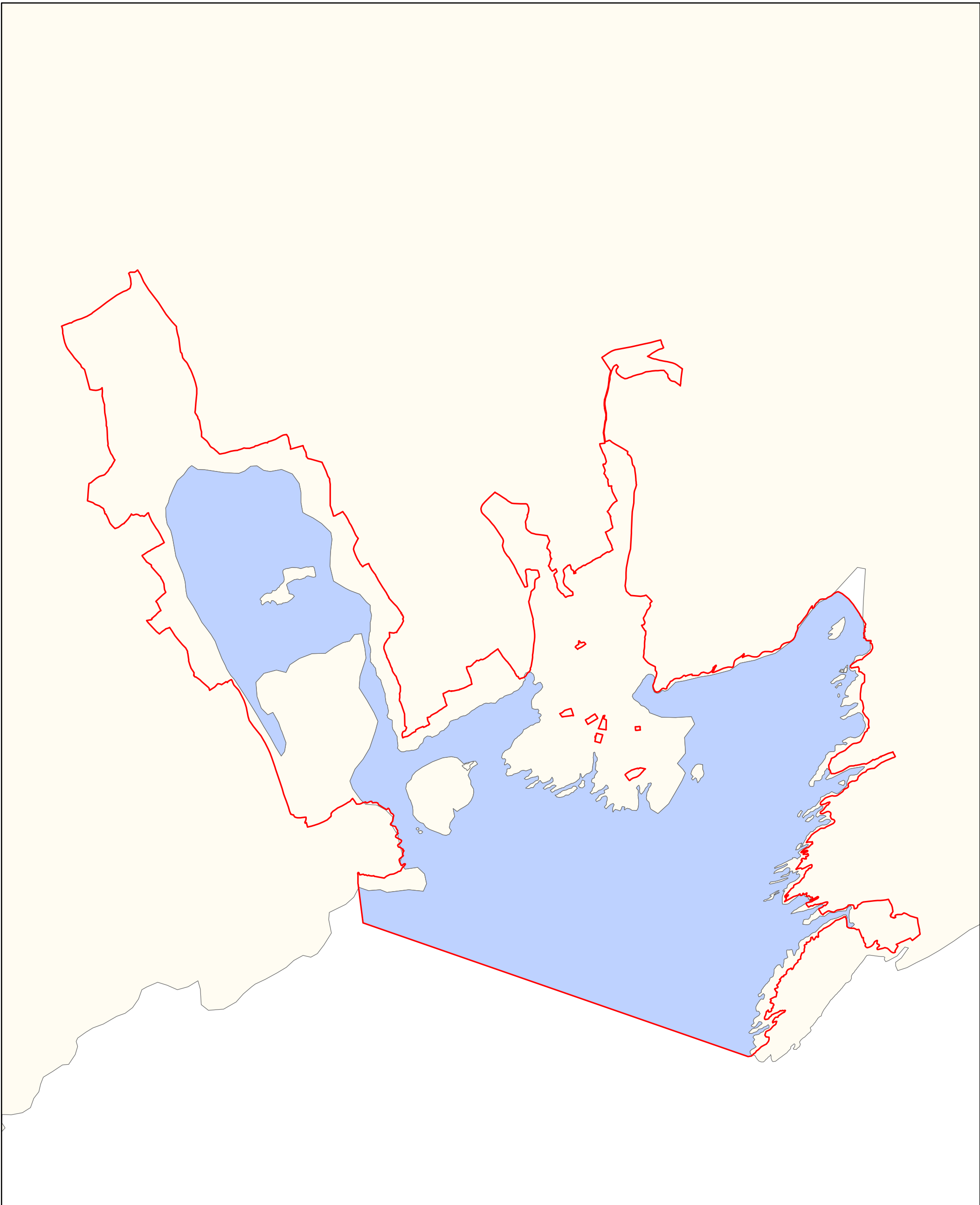
0 1 2 3 4 5 km

The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision.
Ordnance Survey of Ireland Licence No EN 0059214. © Ordnance Survey of Ireland Government of Ireland

Níl sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta. Féadfar athbheithníthe a déanamh ar theorainneacha na gceantar comharthaíthe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059214. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann

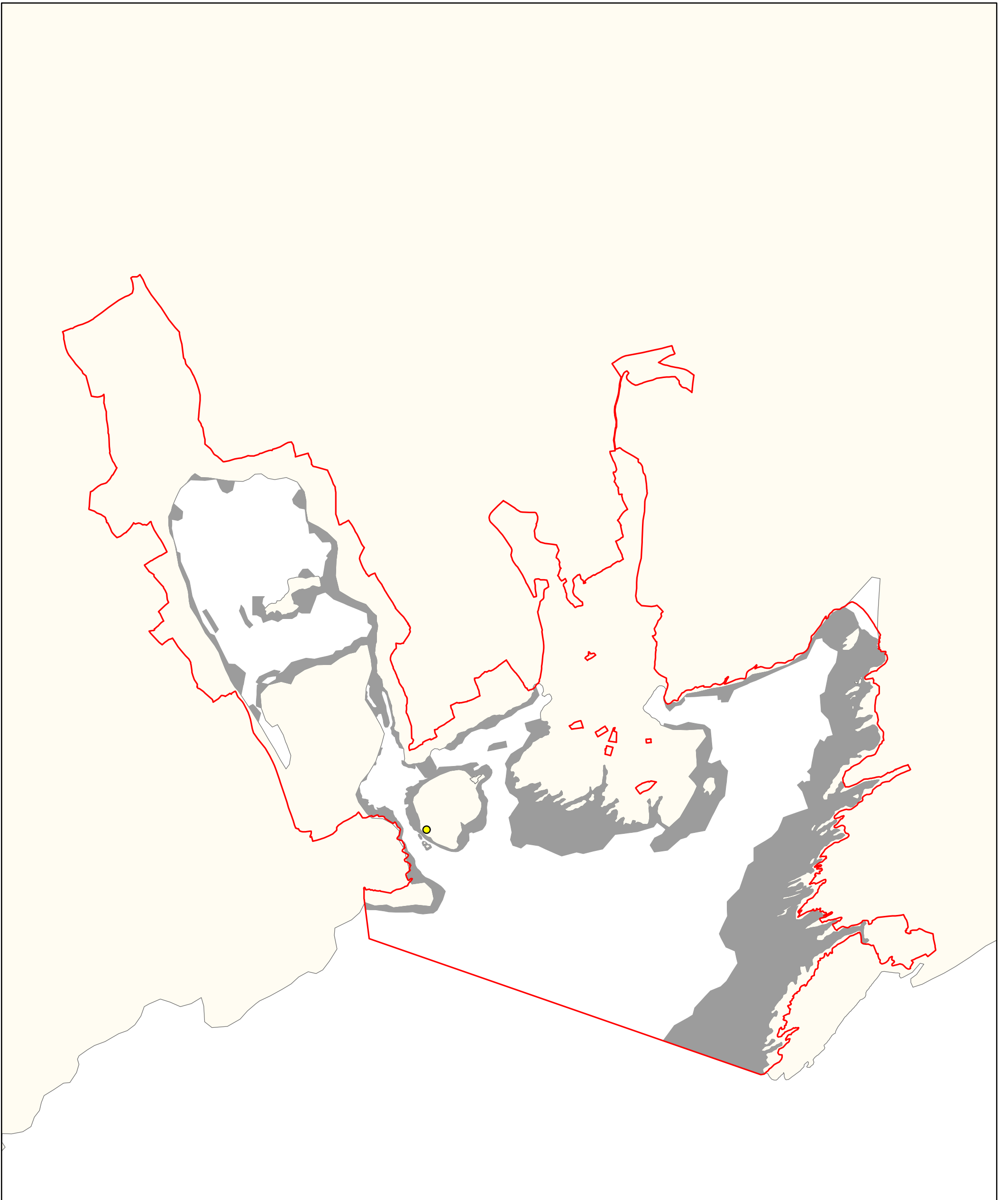


**Map Version 1
Date: Aug 2014**



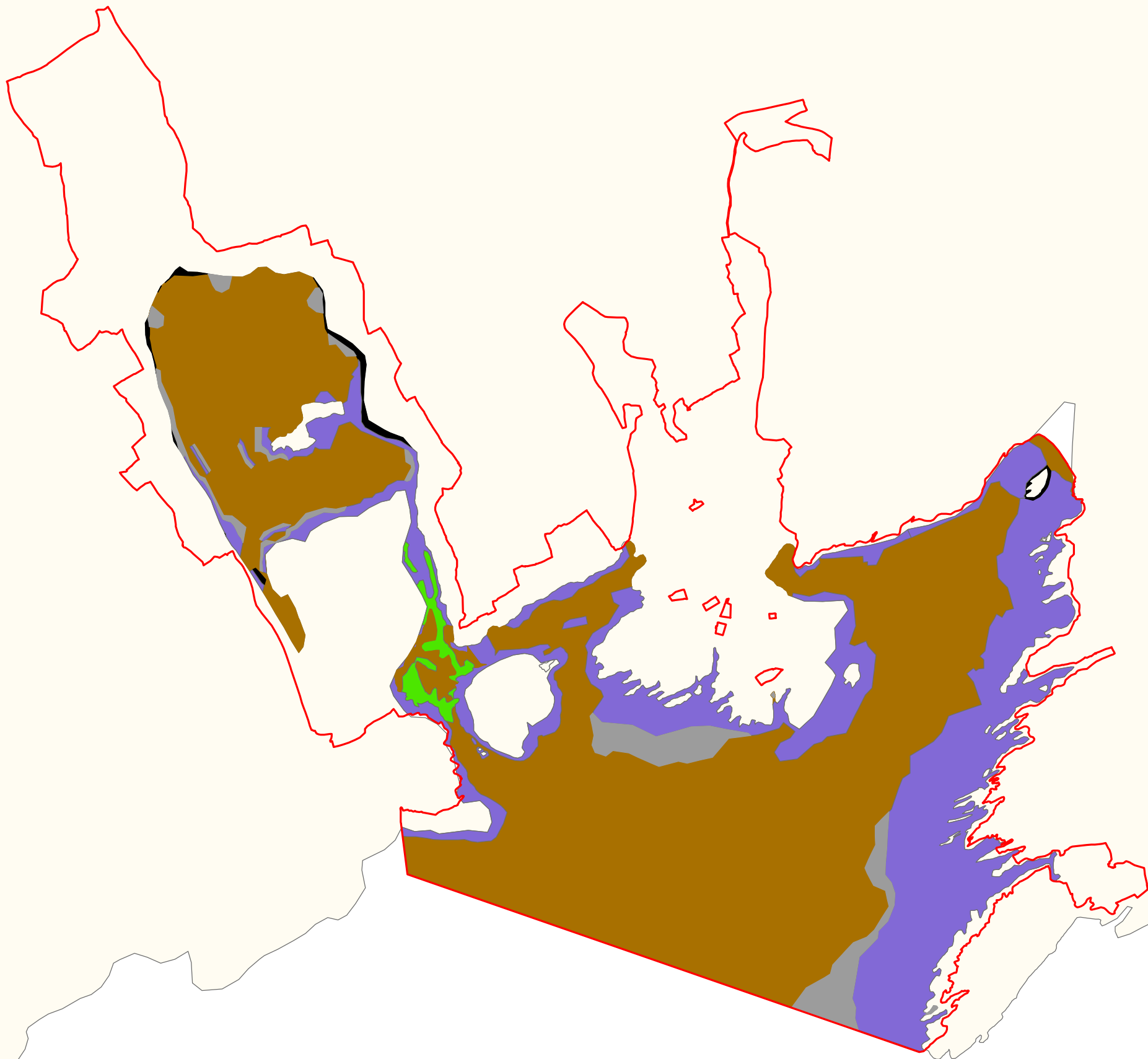
Legend

- Lough Hyne Nature Reserve and Environs SAC 000097
- 1160 Large shallow inlets and bays
- OSi Discovery Series Coastal Boundary



Legend

- Lough Hyne Nature Reserve and Environs SAC 000097
- 1170 Reefs
- 8330 Submerged or partially submerged sea caves
- OSi Discovery Series Coastal Boundary



Legend

- Lough Hyne Nature Reserve and Environs SAC 000097
- OSi Discovery Series Coastal Boundary

Marine Community Types

- Intertidal reef community complex
- Laminaria*-dominated community complex
- Muds to mixed sediment with polychaetes, bivalves and oligochaetes community complex
- Subtidal reef community complex
- Zostera*-dominated community