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National Parks and Wildlife Service

Conservation Objectives Series

Inishmore Island SAC 000213

National Parks and Wildlife Service,
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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***

000213	Inishmore Island SAC
1014	Narrow-mouthed Whorl Snail *Vertigo angustior*
1150	Coastal lagoons*
1170	Reefs
1220	Perennial vegetation of stony banks
1230	Vegetated sea cliffs of the Atlantic and Baltic coasts
1351	Harbour Porpoise *Phocoena phocoena*
2110	Embryonic shifting dunes
2120	Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)*
2170	Dunes with *Salix repens* ssp. *argentea* (Salicion arenariae)
2190	Humid dune slacks
21A0	Machairs (* in Ireland)
4030	European dry heaths
4060	Alpine and Boreal heaths
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)
6510	Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)
8240	Limestone pavements*
8330	Submerged or partially submerged sea caves

Please note that this SAC overlaps with Inishmore SPA (004152). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate. IMPORTANT: This 'Version 2' document includes 1 additional QI (1351). The conservation objectives for pre-existing QIs have generally not been updated.

Supporting documents, relevant reports & publications

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

NPWS Documents

Year :	1998
Title :	Biomar survey of Irish machair sites 1996
Author :	Crawford, I.; Bleasdale, A.; Conaghan, J.
Series :	Irish Wildlife Manual No. 3
Year :	1999
Title :	National Shingle Beach Survey of Ireland 1999
Author :	Moore, D.; Wilson, F.
Series :	Unpublished report to NPWS
Year :	2007
Title :	Inventory of Irish coastal lagoons (version 2)
Author :	Oliver, G.
Series :	Unpublished report to NPWS
Year :	2009
Title :	Coastal Monitoring Project 2004-2006
Author :	Ryle, T.; Murray, A.; Connolly, K.; Swann, M.
Series :	Unpublished report to NPWS
Year :	2011
Title :	National survey and assessment of the conservation status of Irish sea cliffs
Author :	Barron, S.J.; Delaney, A.; Perrin, P.M.; Martin, J.; O'Neill, F.
Series :	Irish Wildlife Manual No. 53
Year :	2011
Title :	Monitoring and condition assessment of populations of *Vertigo geyeri*, *Vertigo angustior* and *Vertigo moulinsiana* in Ireland
Author :	Moorkens, E.; Killeen, I.
Series :	Irish Wildlife Manuals, No. 55
Year :	2013
Title :	Irish semi-natural grasslands survey 2007-2012
Author :	O'Neill, F.H.; Martin, J.R.; Devaney, F.M.; Perrin, P.M.
Series :	Irish Wildlife Manuals, No. 78
Year :	2014
Title :	Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland, Version 2.0
Author :	Perrin, P.M.; Barron, S.J.; Roche, J.R.; O'Hanrahan, B.
Series :	Irish Wildlife Manuals, No. 79
Year :	2015
Title :	Inishmore Island SAC (site code: 213) Conservation objectives supporting document- coastal habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document
Year :	2015
Title :	Inishmore Island SAC (site code:213) Conservation objectives supporting document- coastal lagoons V1
Author :	NPWS
Series :	Conservation objectives supporting document

Year :	2015
Title :	Inishmore Island SAC (site code 213) Conservation objectives supporting document- marine habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document
Year :	2024
Title :	Inishmore Island SAC (site code 000213) Conservation objectives supporting document - Harbour Porpoise 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
Year :	1999
Title :	Wetland mollusc communities from the Aran Islands
Author :	Tattersfield, P.
Series :	Irish Naturalists' Journal 26: 8-21
Year :	2006
Title :	The vegetation of Irish machair
Author :	Gaynor, K.
Series :	Biology and Environment: Proceedings of the Royal Irish Academy, 106B(3): 311-321
Year :	2008
Title :	The phytosociology and conservation value of Irish sand dunes
Author :	Gaynor, K.
Series :	Unpublished Ph.D. Thesis, National University of Ireland, Dublin
Year :	2012
Title :	Survey of Irish sea caves
Author :	MERC
Series :	Unpublished report to the Marine Institute and NPWS
Year :	2013
Title :	Monitoring and assessment of Irish lagoons for the purposes of the EU Water Framework Directive, 2009-2011. Parts 1 and 2
Author :	Roden, C.M.; Oliver, G.A.
Series :	Unpublished report to the Environmental Protection Agency
Year :	2013
Title :	Intertidal and subtidal reef survey of Inishmore Island SAC and Inishmore SPA
Author :	MERC
Series :	Unpublished report to the Marine Institute and NPWS

Spatial data sources

Year :	Revision 2011
Title :	Inventory of Irish Coastal Lagoons. Version 3
GIS Operations :	Clipped to SAC boundary
Used For :	1150 (map 3)
Year :	Interpolated 2014
Title :	2012 subtidal and intertidal reef survey
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)
Year :	Derived 2014
Title :	Internal NPWS files
GIS Operations :	Dataset created from spatial references supplied by NPWS experts. Expert opinion used as necessary to resolve any issues arising
Used For :	8330 (map 4)
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)
Year :	2011
Title :	National survey and assessment of the conservation status of Irish sea cliffs
GIS Operations :	Clipped to SAC boundary
Used For :	1230 (map 6)
Year :	2009
Title :	Coastal Monitoring Project 2004-2006. Version 1
GIS Operations :	QIs selected; clipped to SAC boundary; overlapping regions with Saltmarsh CO data investigated and resolved with expert opinion used
Used For :	1220, 2110, 2120, 2130, 21A0 (map 7)
Year :	Revision 2012
Title :	National Shingle Beach Survey
GIS Operations :	Clipped to SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	1220 (map 7)
Year :	2013
Title :	National Survey of Limestone Pavement and Associated Habitats in Ireland distribution data
GIS Operations :	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	8240 (map 8)
Year :	2013
Title :	Irish Semi-Natural Grassland Survey
GIS Operations :	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	6210, 6510 (map 8)
Year :	2006
Title :	Grassland Monitoring Project 2006
GIS Operations :	Dataset clipped to the SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	6210, 6510 (map 8)

Year :	2014
Title :	NPWS rare and threatened species database
GIS Operations :	Dataset created from spatial references in database records. Expert opinion used as necessary to resolve any issues arising
Used For :	1014 (map 9)

Conservation Objectives for : Inishmore Island SAC [000213]

1150 Coastal lagoons*

To restore the favourable conservation condition of Coastal lagoons in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable, subject to slight natural variation. Favourable reference area 7.98ha. See map 3	Area calculated from spatial data derived from Oliver, 2007. Site code IL042 (Loch an tSáile), site code IL043 (Phort Chorrúch), site code IL044 (Loch an Chara) and site code IL045 (Loch Derg). See lagoons supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 3	Site code IL042 (Loch an tSáile), Site code IL043 (Phort Chorrúch), Site code IL044 (Loch an Chara) and Site code IL045 (Loch Derg) in Oliver, 2007. See lagoons supporting document for further details
Salinity regime	Practical salinity units (psu)	Median annual salinity and temporal variation within natural ranges	Loch an tSáile is recorded as a mesohaline-euhaline lagoon; Phort Chorrúch as oligohaline; Loch an Chara as mesohaline-euhaline; and Loch Dearg as euhaline. See lagoons supporting document for further details
Hydrological regime	Metres	Annual water level fluctuations and minima within natural ranges	Maximum depth of Loch an tSáile is recorded as <1m; maximum depth of Phort Chorrúch as <1m; maximum depth of Loch an Chara as <1m; and maximum depth of Loch Dearg as <2m. See lagoons supporting document for further details
Barrier: connectivity between lagoon and sea	Permeability	Appropriate hydrological connections between lagoons and sea, including where necessary, appropriate management	Loch Dearg is described as an "estuarine" karst lagoon; Phort Chorrúc has a karst lagoon with cobble barrier; Loch an Chara as a karst lagoon with artificial sluiced inlet; and Loch Dearg as a karst lagoon with cobble barrier. See lagoons supoporting document for further details
Water quality: Chlorophyll *a*	µg/L	Annual median chlorophyll *a* within natural ranges and less than 5µg/L	Target based on Roden and Oliver (2013). See lagoons supporting document for further details
Water quality: Molybdate Reactive Phosphorus (MRP)	mg/L	Annual median MRP within natural ranges and less than 0.1mg/L	Target based on Roden and Oliver (2013). See lagoons supporting document for further details
Water quality: Dissolved Inorganic Nitrogen (DIN)	mg/L	Annual median DIN within natural ranges and less than 0.15mg/L	Target based on Roden and Oliver (2013). See lagoons supporting document for further details
Depth of macrophyte colonisation	Metres	Macrophyte colonisation to maximum depth of lagoons	Where a lagoon is less than 2m deep, it is expected that macrophyte colonisation would extend to the full depth. See lagoons supporting document for further details
Typical plant species	Number and m^2	Maintain number and extent of listed lagoonal specialists, subject to natural variation	Species listed in Oliver, 2007. See lagoons supporting document for further details
Typical animal species	Number	Maintain listed lagoon specialists, subject to natural variation	Species listed in Oliver, 2007. See lagoons supporting document for further details
Negative indicator species	Number and % cover	Negative indicator species absent or under control	Low salinity, shallow water and elevated nutrient levels increase the threat of unnatural encroachment by reedbeds. See lagoons supporting document for further details

1170 Reefs

To maintain the favourable conservation condition of Reefs in Inishmore Island 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 estimated as 6,330ha from a 1993 BioMar survey (Picton and Costello, 1997) and intertidal and subtidal reef surveys undertaken in 2012 (MERC, 2013)
Distribution	Occurrence	The distribution of reefs remains stable, subject to natural processes. See map 4 for mapped distribution	Based on information from a 1993 BioMar survey (Picton and Costello, 1997) and intertidal and subtidal reef surveys undertaken in 2012 (MERC, 2013). See marine supporting document for further details
Community structure	Biological composition	Conserve the following community types in a natural condition: Intertidal reef community complex; *Laminaria*-dominated community complex; Subtidal reef community complex. See map 5	Reef mapping based on information from a 1993 BioMar survey (Picton and Costello, 1997) and intertidal and subtidal reef surveys undertaken in 2012 (MERC, 2013). See marine supporting document for further details

1220 Perennial vegetation of stony banks

To maintain the favourable conservation condition of Perennial vegetation of stony banks in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession	Current area unknown. Vegetated shingle was recorded at eight sub-sites during the National Shingle Beach Survey (NSBS) (Moore and Wilson, 1999): An Gleannachan, An Clochan, Port Mhuirbhigh, An Scailp Fhada, Port Chorruch, Port Eochla, Portnamonastragh and Tra na bhFrancach. The Coastal Monitoring Project (CMP) recorded 0.44ha of this habitat at Eararna and Portmurvey (Ryle et al., 2009). NB further unsurveyed areas maybe present within the SAC. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 7 for survey sites	There is limited information on the distribution of this habitat at Inishmore; however, shingle deposits were recorded along the northern and northeastern coastline of the island by Moore and Wilson (1999)
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Based on data from Moore and Wilson (1999). Shingle features are relatively stable in the long term. Sea walls were recorded at An Gleannachan, Port Mhuirbhigh, Portnamonastragh and Tra na bhFrancach. Extraction was noted at An Gleannachan. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	The vegetated shingle habitat on Inishmore Island is associated with lowland karst, intertidal shingle, lagoon and sand dunes. See coastal habitats supporting document for further details as well as the conservation objective for Coastal lagoons (1150)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the typical vegetated shingle flora including the range of sub-communities within the different zones	Based on data from Moore and Wilson (1999). The Red Data Book species sea kale (*Crambe maritima*) was recorded at An Gleannachan. See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Moore and Wilson (1999). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. See coastal habitats supporting document for further details

1230 Vegetated sea cliffs of the Atlantic and Baltic coasts

To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat length	Kilometres	Area stable, subject to natural processes, including erosion. For sub-site mapped: For sub-site mapped: Onaght - 17.38km. See map 6	Based on data from the Irish Sea Cliff Survey (ISCS) (Barron et al., 2011). Cliffs are linear features and are therefore measured in kilometres. One sub-site was identified using a combination of aerial photos and the DCENR helicopter viewer. The length of each cliff was measured (in some cases the cliff was measured in sections) to give a total estimated area of 17.38km within the SAC. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 6	Based on data from Barron et al. (2011). Cliffs up to 80m high dominate the south-west coastline of Inishmore Island. See coastal habitats supporting document for further details
Physical structure: functionality and hydrological regime	Occurrence of artificial barriers	No alteration to natural functioning of geomorphological and hydrological processes due to artificial structures	Based on data from Barron et al. (2011). Maintaining natural geomorphological processes including natural erosion is important for the health of a vegetated sea cliff. Hydrological processes maintain flushes and in some cases tufa formations that can be associated with sea cliffs. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub-communities with typical species listed in the Irish Sea Cliff Survey (Barron et al., 2011)	See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from the ISCS (Barron et al., 2011). See coastal habitats supporting document for further details
Vegetation composition: bracken and woody species	Percentage	Cover of bracken (*Pteridium aquilinum*) on grassland and/or heath less than 10%. Cover of woody species on grassland and/or heath less than 20%	Based on data from the ISCS (Barron et al., 2011). See coastal habitats supporting document for further details

2110 Embryonic shifting dunes

To maintain the favourable conservation condition of Embryonic shifting dunes in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-sites mapped: Eararna - 0.10ha, Portmurvy - 0.12ha. See map 7	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Habitat is very difficult to measure in view of its dynamic nature. Habitat was recorded at two sub-sites, giving a total estimated area of 0.22ha. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 7 for known distribution	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation resulting in increased rates of erosion. There is a sea wall at Portmurvy which, according to the CMP, has contributed to a build up of a relatively wide area of embryo dunes. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: plant health of foredune grasses	Percentage cover	More than 95% of sand couch grass (*Elytrigia juncea*) and/or lyme grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities with typical species: sand couch grass (*Elytrigia juncea*) and/or lyme grass (*Leymus arenarius*)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-native species) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn (*Hippophae rhamnoides*) should be absent or effectively controlled. See coastal habitats supporting document for further details

2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)

To maintain the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For sub-site mapped: Eararna-1.63ha. See map 7	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al. 2009). Habitat was mapped at one sub-site, giving a total estimated area of 1.63ha. Habitat is very difficult to measure in view of its dynamic nature. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 7 for known distribution	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Marram grass (*Ammophila arenaria*) reproduces vegetatively and requires constant accretion of fresh sand to maintain active growth encouraging further accretion. The mobile dunes at Eararna are impacted by trampling and bike scrambling, which has compounded the natural erosion affecting the seaward edge of the dunes. A sea wall occurs at Portmurvy. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: plant health of dune grasses	Percentage cover	95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn (*Hippophae rhamnoides*) should be absent or effectively controlled. See coastal habitats supporting document for further details

2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*

To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For sub-sites mapped: Eararna - 57.86ha; Portmurvy - 2.20ha. See map 7	Based on data from Coastal Monitoring Project (CMP) (Ryle et al. 2009). Habitat mapped at two sub-sites to give a total estimated area of 60.06ha. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 7 for known distribution	See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation resulting in increased rates of erosion. A sea wall occurs at Portmurvy. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: sward height	Centimetres	Maintain structural variation within sward	Based on data from Gaynor (2008) and Ryle et al. (2009). At Eararna the CMP recorded light levels of grazing in the fixed dunes at Barr na Coise. At Portmurvy low levels of grazing were noted. See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with typical species listed in Ryle et al. (2009)	Based on data from Gaynor (2008) and Ryle et al. (2009). Notable species recorded include bee orchid (*Orchis apifera*), sea kale (*Crambe maritima*), hairy violet (*Viola hirta*) and purple milk-vetch (*Astragalus danicus*). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn (*Hippophae rhamnoides*) should be absent or effectively controlled. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	No more than 5% cover or under control	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details

2170 Dunes with *Salix repens* ssp. *argentea* (Salicion arenariae)

To maintain the favourable conservation condition of Dunes with *Salix repens* ssp. *argentea* (Salicion arenariae) in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession	Current extent and status of this habitat in the SAC is unclear. It was not recorded by the Coastal Monitoring Project (CMP) (Ryle et al., 2009). See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes	See note above and coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation resulting in increased rates of erosion. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% cover, subject to natural processes	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub-communities with typical species listed in Ryle et al. (2009)	See coastal habitats supporting document for further details
Vegetation composition: cover and height of *Salix repens*	Percentage cover; centimetres	Maintain more than 10% cover of *Salix repens* (creeping willow); vegetation height should be in the average range 5 - 20cm	Based on data from Ryle et al. (2009). Cover of creeping willow (*Salix repens*) should be maintained (e.g. through an appropriate grazing regime) to prevent the development of coarse, rank vegetation cover. See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover at a representative number of monitoring stops	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn (*Hippophae rhamnoides*) should be absent or effectively controlled. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	For trees and scrub other than creeping willow (*Salix repens*), there should be no more than 5% cover or their presence should be under control	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details

2190 Humid dune slacks

To maintain the favourable conservation condition of Humid dune slacks in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession	Current extent and status of this habitat in the SAC is unclear. It was not recorded by the Coastal Monitoring Project (CMP) (Ryle et al., 2009). See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes	See note above and coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation, resulting in increased rates of erosion. See coastal habitats supporting document for further details
Physical structure: hydrological and flooding regime	Water table levels; groundwater fluctuations (metres)	Maintain natural hydrological regime	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub-communities with typical species listed in Ryle et al. (2009)	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: cover of *Salix repens*	Percentage cover; centimetres	Maintain less than 40% cover of creeping willow (*Salix repens*)	Based on datafrom Ryle et al. (2009). Cover of creeping willow (*Salix repens*) should be maintained (e.g. through an appropriate grazing regime) to prevent the development of coarse, rank vegetation cover. See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	No more than 5% cover or under control	Based on data from CMP (Ryle et al. 2009). See coastal habitats supporting document for further details

21A0 Machairs (* in Ireland)

To restore the favourable conservation condition of Machairs in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For sub-sites mapped: Eararna-32.22ha; Portmurvy - 4.79ha. See map 7	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Two sub-sites were mapped, giving a total estimated area of 37.01ha. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 7 for known distribution	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: hydrological and flooding regime	Water table levels; groundwater fluctuations (metres)	Maintain natural hydrological regime	Based on data from Ryle et al. (2009), Crawford et al. (1996) and Gaynor (2006). See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of machair habitat, subject to natural processes	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: sward height	Centimeters	Maintain structural variation within sward	Based on data from Gaynor (2008) and Ryle et al. (2009). The machair at Eararna is overgrazed. Grazing intensity is low at Portmurvy. See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub-communities with typical species listed in Ryle et al. (2009)	Based on data from Gaynor (2008) and Ryle et al. (2009). Notable species recorded include bee orchid (*Orchis apifera*), sea kale (*Crambe maritima*), hairy violet (*Viola hirta*) and purple milk-vetch (*Astragalus danicus*). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	No more than 5% cover or under control	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: bryophytes	Percentage cover	Should always be at least an occasional component of the vegetation	Based on data from Ryle et al. (2009). There is a high cover of bryophytes throughout the machair at Eararna. See coastal habitats supporting document for further details

4030 European dry heaths

To maintain the favourable conservation condition of European dry heaths in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Total area of dry heaths within the SAC has not been calculated but as it occurs in intimate association with other habitats including the priority Annex I habitats Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (6210) and Limestone pavements (8240) (NPWS internal files), they are difficult to map separately. Conservation objectives for the relevant habitats should be used in conjunction with each other as appropriate
Habitat distribution	Occurrence	No decline from current habitat distribution, subject to natural processes	See notes for area above
Ecosystem function: soil nutrient status	Soil pH and nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Changes to soil nutrient status can occur from application of manure or fertiliser, high stock densities or supplementary feeding above appropriate levels
Vegetation composition: positive indicator species	Number and percentage cover at a representative number of monitoring stops	At least two positive indicator species, as listed in Perrin et al. (2014), with combined cover of at least 50%	Attribute and target based on Perrin et al. (2014). Bell heather (*Erica cinerea*) and ling (*Calluna vulgaris*) occur in the heathy areas in this SAC (NPWS internal files)
Vegetation composition: bryophyte and non-crustose lichen species	Number at a representative number of monitoring stops	At least three bryophyte or non-crustose lichen species present, excluding *Campylopus* and *Polytrichum* moss species	Attribute and target based on Perrin et al. (2014)
Vegetation composition: rare/scarce species	Occurrence and population size	No decline in distribution or population sizes of rare/scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order 1999 and/or the red data book (Curtis and McGough, 1988). Hoary rock-rose (*Helianthemun oelandicum*), a red data book species is recorded in heathy habitats in this SAC (internal NPWS files)
Vegetation structure: dwarf shrub species	Percentage cover at a representative number of monitoring stops	Cover of bog myrtle (*Myrica gale*), creeping willow (*Salix repens*) and Western gorse (*Ulex gallii*) collectively less than 50%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: negative indicator weed species	Percentage cover at a representative number of monitoring stops	Cover of negative indicator weedy species collectively less than 1%	Attribute and target based on Perrin et al. (2014), where weed species are also listed
Vegetation composition: non-native species	Percentage cover at a representative number of monitoring stops and in local vicinity	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: native trees and shrubs	Pecentage cover in local vicinity	Cover of scattered native trees and shrubs less than 20%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: bracken	Pecentage cover in local vicinity	Cover of bracken (*Pteridium aquilinum*) less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: soft rush	Percentage cover in local vicinity	Cover of soft rush (*Juncus effusus*) less than 10%	Attribute and target based on Perrin et al. (2014). Dense areas of soft rush can indicate disturbance
Vegetation structure: senescent ling	Percentage cover at a representative number of monitoring stops	Senescent proportion of ling (*Calluna vulgaris*) cover less than 50%	Attribute and target based on Perrin et al. (2014)

Vegetation structure: growth phases of ling	Percentage cover in local vicinity	Outside boundaries of sensitive areas, all growth phases of ling (*Calluna vulgaris*) should occur throughout, with at least 10% of cover in mature phase	Attribute and target based on Perrin et al. (2014), where sensitive areas and growth phases are defined
Vegetation structure: signs of browsing	Percentage cover at a representative number of monitoring stops	Last complete growing season's shoots of ericoids showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity	No signs of burning within sensitive areas	Attribute and target based on Perrin et al. (2014) where sensitive areas are also defined
Physical structure: disturbed bare ground	Percentage cover at a representative number of monitoring stops and in local vicinity	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)

Conservation Objectives for : Inishmore Island SAC [000213]

4060 Alpine and Boreal heaths

The status of Alpine and Boreal heaths as a qualifying Annex I habitat in Inishmore Island SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this habitat

Attribute	Measure	Target	Notes

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)

To maintain the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) in Inishmore Island in following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) occurs in intimate association with other Annex I habitats including limestone pavement, sand dune, heath and other grassland habitats. Therefore, they cannot easily be mapped or considered separately. Conservation objectives for all these habitats should be used in conjunction with each other as appropriate. Dwyer et al. (2006) and the Irish semi-natural grasslands survey (O'Neill et al., 2013) surveyed some areas of semi-natural grassland within the SAC in detail. See map 8 for indicative area of semi-natural grasslands
Habitat distribution	Occurrence	No decline, subject to natural processes	See notes for area above
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present, including two "high quality" species	List of positive indicator species, including high quality species, identified by the Irish semi-natural grasslands survey (O'Neill et al., 2013). This document should be consulted for further details
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%	List of negative indicator species identified by O'Neill et al. (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1%	Attribute and target based on O'Neill et al. (2013)
Vegetation composition: woody species and bracken	Percentage at a representative number of monitoring stops	Cover of woody species (except certain listed species) and bracken (*Pteridium aquilinum*) not more than 5% cover	Woody species that can occur above 5% cover are juniper (*Juniperus communis*) and burnet rose (*Rosa spinosissima*). Attribute and target based on O'Neill et al. (2013)
Vegetation structure: broadleaf herb: grass ratio	Percentage at a representative number of monitoring stops	Broadleaf herb component of vegetation between 40 and 90%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: sward height	Percentage at a representative number of monitoring stops	At least 30% of sward between 5cm and 40cm tall	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: litter	Percentage at a representative number of monitoring stops	Litter cover not more than 25%	Attribute and target based on O'Neill et al. (2013)
Physical structure: bare soil	Percentage at a representative number of monitoring stops	Not more than 10% bare soil	Attribute and target based on O'Neill et al. (2013)
Physical structure: disturbance	Square metres	Area showing signs of serious grazing or other disturbance less than 20m²	Attribute and target based on O'Neill et al. (2013)

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

To maintain the favourable conservation condition of Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Extent of this habitat in this SAC is currently unknown. Internal NPWS files note the presence of floristically diverse meadows that occur in mosaic with other grasslands including Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) (6210). However, further work is required to establish the nature and extent of hay meadows in the SAC, including the requirement for management by mowing. Dwyer et al. (2006) and the Irish semi-natural grasslands survey (O'Neill et al., 2013) surveyed some areas of semi-natural grassland within the SAC in detail. See map 8 for indicative area of semi-natural grasslands
Habitat distribution	Occurrence	No decline, subject to natural processes	Distribution of this habitat in this SAC is currently unknown. See notes for area above
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present, including one "high quality" species as listed in O'Neill et al. (2013)	List of positive indicator species, including high quality species, identified by the Irish semi-natural grasslands survey (O'Neill et al., 2013). This document should be consulted for further details
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%	List of negative indicator species identified by O'Neill et al. (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1%	Attribute and target based on O'Neill et al. (2013)
Vegetation composition: woody species and bracken	Percentage at a representative number of monitoring stops	Cover of woody species and bracken not more than 5%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: broadleaf herb: grass ratio	Percentage at a representative number of monitoring stops	Broadleaf herb component of vegetation between 40 and 90%	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: sward height	Percentage at a representative number of monitoring stops	At least 50% of sward between 10cm and 50cm tall	Attribute and target based on O'Neill et al. (2013)
Vegetation structure: litter	Percentage at a representative number of monitoring stops	Litter cover not more than 25%	Attribute and target based on O'Neill et al. (2013)
Physical structure: bare soil	Percentage at a representative number of monitoring stops	Not more than 5% bare soil	Attribute and target based on O'Neill et al. (2013)
Physical structure: disturbance	Square metres	Area showing signs of serious grazing or other disturbance less than 20m²	Attribute and target based on O'Neill et al. (2013)

8240 Limestone pavements*

To maintain the favourable conservation condition of Limestone pavements in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Limestone pavements occurs in intimate association with other Annex I habitats in this SAC including sand dune, heath and grassland habitats. Therefore, these habitats cannot easily be mapped or considered separately. Conservation objectives for all these habitats should be used in conjunction with each other as appropriate. Wilson and Fernandez (2013) mapped the indicative area of limestone pavement, including mosaics with other habitats as 1,753ha (map 8). This survey should be consulted for further details
Habitat distribution	Occurrence	No decline. Map 8 shows indicative distribution, including mosaics with other habitats	See notes for area above. Based on data from Wilson and Fernandez (2013)
Vegetation composition: typical species	Number at a representative number of monitoring stops	At least seven positive indicator species present	Positive indicator species listed in Wilson and Fernandez (2013)
Vegetation composition: negative indicator species	Percentage at a representative number of monitoring stops	Collective cover of negative indicator species on exposed pavement not more than 1%	Negative indicator species listed in Wilson and Fernandez (2013)
Vegetation composition: non-native species	Percentage at a representative number of monitoring stops	Cover of non-native species not more than 1% on exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Vegetation composition: scrub	Percentage at a representative number of monitoring stops	Scrub cover no more than 25% of exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Vegetation composition: bracken cover	Percentage at a representative number of monitoring stops	Bracken (*Pteridium aquilinum*) cover no more than 10% on exposed pavement	Attribute and target based on Wilson and Fernandez (2013)
Indicators of local distinctiveness	Occurrence	Indicators of local distinctiveness are maintained	Includes red-data and other rare or localised species as well as archaeological and geological features, which often support distinctive species. Wood small-reed (*Calamagrostis epigejos*), a species listed in the Flora (Protection) Order, 1999 and the red data book (Curtis and McGough, 1988) is noted for this SAC

8330 Submerged or partially submerged sea caves

To maintain the favourable conservation condition of Submerged or partially submerged sea caves in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent area of sea caves is stable or increasing, subject to natural processes	Habitat area for mapped caves was estimated as 1ha, based on a survey in 2012 (MERC, 2012). NB other sea caves may occur in the SAC. See marine supporting document for further details
Distribution	Occurrence	The distribution of sea caves occurring in the site should remain stable, subject to natural processes. See map 3 for known caves	Sea cave distribution at this site is derived from expert knowledge. NB other sea caves may occur in the SAC. See marine supporting document for further details
Community structure	Biological composition	Conserve the following community type in a natural condition: Sea cave community complex	The sea cave community complex description is derived from a survey undertaken in 2012 (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

1014 Narrow-mouthed Whorl Snail *Vertigo angustior*

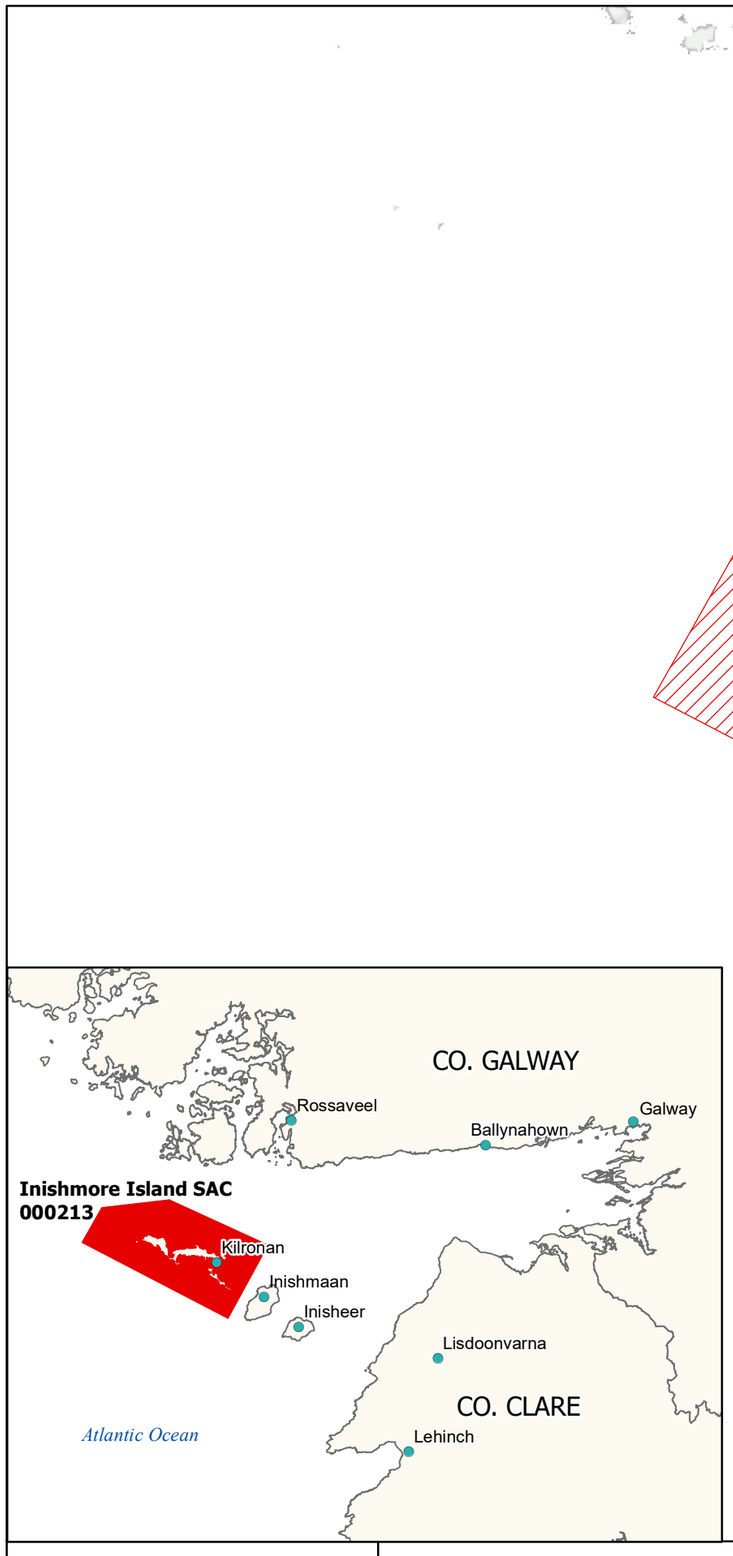
To maintain the favourable conservation condition of Narrow-mouthed Whorl Snail in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Distribution: occupied sites	Number	No decline. There are three known sites for this species in the SAC, within four 1km squares- L7711, L8210, L8310, L8907. See map 9	L7711 (at western end of the island) from Tattersfield, (1999); L8210, L8310 (Cill Mhuirbhigh) and L8907 (airport) from Moorkens and Killeen (2011) (site code VaCAM16). These are the only known island populations of this species in Ireland
Occurrence in suitable habitat	Percentage positive records in a representative number of samples	No decline. A minimum of 60% of samples positive in optimal habitat and 20% in sub-optimal habitat	From Moorkens and Killeen (2011). Positive samples mean the confirmed presence of snails (either living or recently dead adults and/or juveniles). See habitat extent target below for definition of optimal and sub-optimal habitat.
Optimal soil wetness	Metres along transect; Percentage of representative number of monitoring stops	Soils, at time of sampling, are damp (optimal wetness) for at least 50m along the established transect; at least 75% of sampling stops are at optimal wetness	Transect established at Cill Mhuirbhigh as part of condition assessment monitoring (Moorkens and Killeen, 2011). Optimal wetness also defined by Moorkens and Killeen (2011)
Habitat extent	Hectares	Stable or increasing, subject to natural processes. No less than 15ha of at least sub-optimal habitat at Cill Mhuirbhigh and no less than 2ha at the airport	From Moorkens and Killeen (2011). Optimal habitat is defined as fixed dune species-rich grassland dominated by red fescue (*Festuca rubra*) and marram grass (*Ammophila arenaria*), with sparse low growing herbs or machair grassland with good botanical diversity. Vegetation is in height range 10-40cm and the habitat is on damp, friable soil covered with a layer of humid, open structured thatch. Sub-optimal habitat is as above but either mean vegetation height is less than 10cm or above 50cm, or the soil is dry and sandy, or the thatch is wetter with a denser structure

1351 Harbour Porpoise *Phocoena phocoena*

To maintain the Favourable conservation condition of Harbour Porpoise (*Phocoena phocoena*) in Inishmore Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Access to suitable habitat	Number of artificial barriers	Species range within the site should not be restricted by artificial barriers to site use. See map 1	See the Inishmore Island SAC conservation objectives supporting document - Harbour Porpoise for further details (NPWS, 2024)
Disturbance	Level of impact	Human activities should occur at levels that do not adversely affect the Harbour Porpoise community at the site	See the Inishmore Island SAC conservation objectives supporting document - Harbour Porpoise for further details (NPWS, 2024)



Legend

Inishmore Island SAC 000213

MAP 1:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
SAC DESIGNATION

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

SITE CODE:
SAC 000213; version 3.03
CO. GALWAY

0 1 2 4 Kilometres

The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision.
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arna atáirgeadh faoin rannán mapála Náisiúnta d'uimhir cheadúnais Táilte Éireann CYAL50351092

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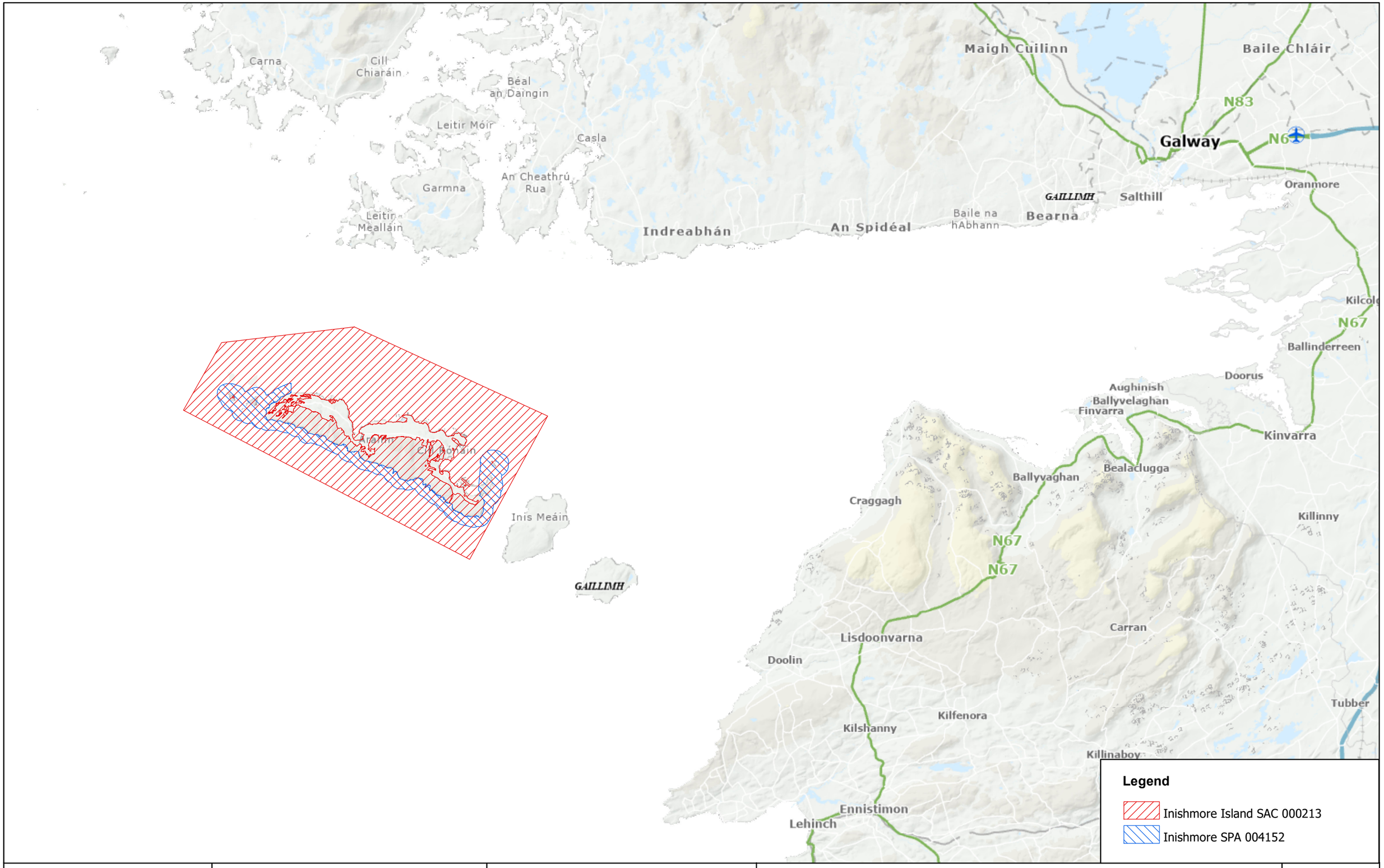
Map version 2
Date: November 2024



Legend

- Inishmore Island SAC 000213
- Inishmore SPA 004152

NPWS An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra National Parks and Wildlife Service

MAP 2:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
OVERLAPPING AND ADJACENT SITES

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

SITE CODE:
SAC 000213; version 3.03
CO. GALWAY

0 2 4 8 Kilometres

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arna atáirgeadh faoin rannán mapála Náisiúnta d'uimhir cheadúnais Táilte Éireann CYAL50351092

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Map version 2
Date: November 2024

Loch Dearg, Arainn IL045

L. Phort Chorruch, Arainn IL043

Loch an Chara, Arainn IL044

Loch an tSaile, Arainn IL042

Map Extent

Legend

- Inishmore Island SAC 000213
- 1150 *Coastal lagoons
- OSi Discovery Series County Boundary

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Department of Arts, Heritage and the Gaeltacht

MAP 3:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
COASTAL LAGOONS

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

SITE CODE:
SAC 000213; version 3.01. CO. GALWAY

0 0.25 0.5 0.75 1 km

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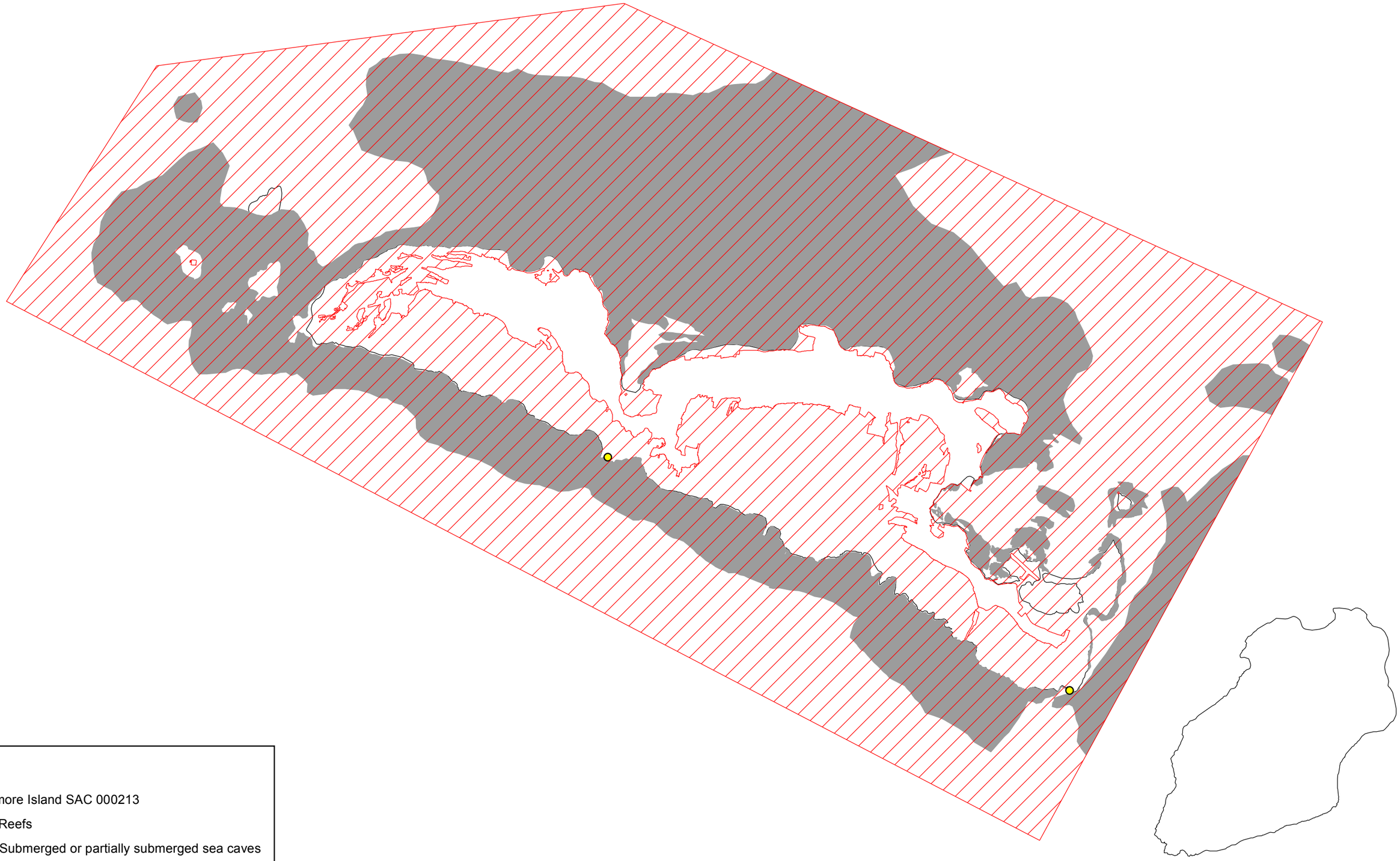
Map Version 1
Date: Jan 2015



Legend

- Inishmore Island SAC 000213
- 1170 Reefs
- 8330 Submerged or partially submerged sea caves
- OSi Discovery Series County Boundary

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

MAP 4:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
REEFS & SEA CAVES

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

SITE CODE:
SAC 000213; version 3.01. CO. GALWAY

0 1 2 3 4 km

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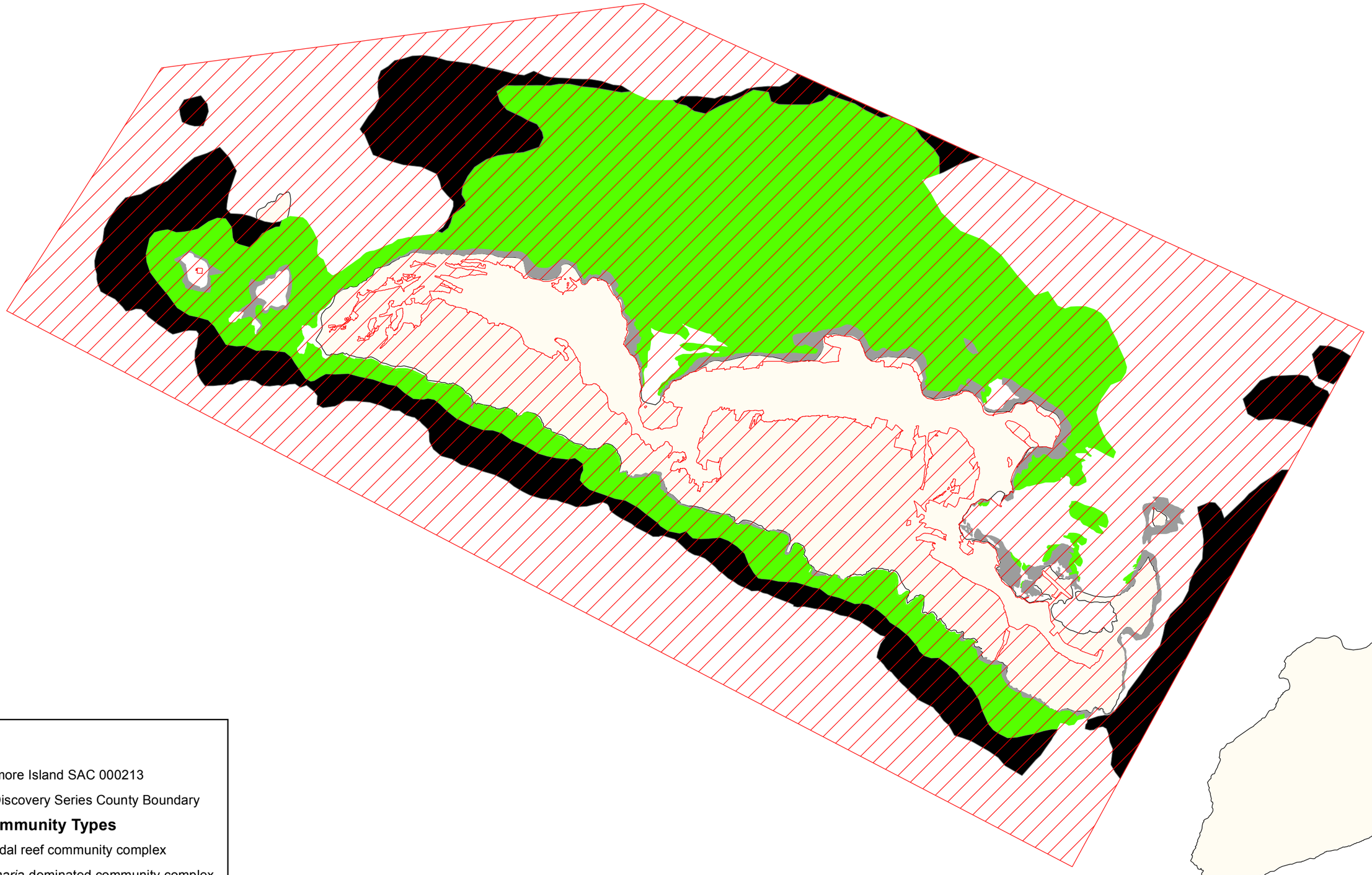
Map Version 1
Date: Jan 2015



Legend

- Inishmore Island SAC 000213
- OSi Discovery Series County Boundary

Marine Community Types

- Intertidal reef community complex
- *Laminaria*-dominated community complex
- Subtidal reef community complex

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MAP 5:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
MARINE COMMUNITY TYPES

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

SITE CODE:
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0 1 2 3 4 km

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Map Version 1
Date: Jan 2015

Onaght
Site Id: 05006

Legend

- Inishmore Island SAC 000213
- 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts
- OSi Discovery Series County Boundary

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MAP 6:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
VEGETATED SEA CLIFFS

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

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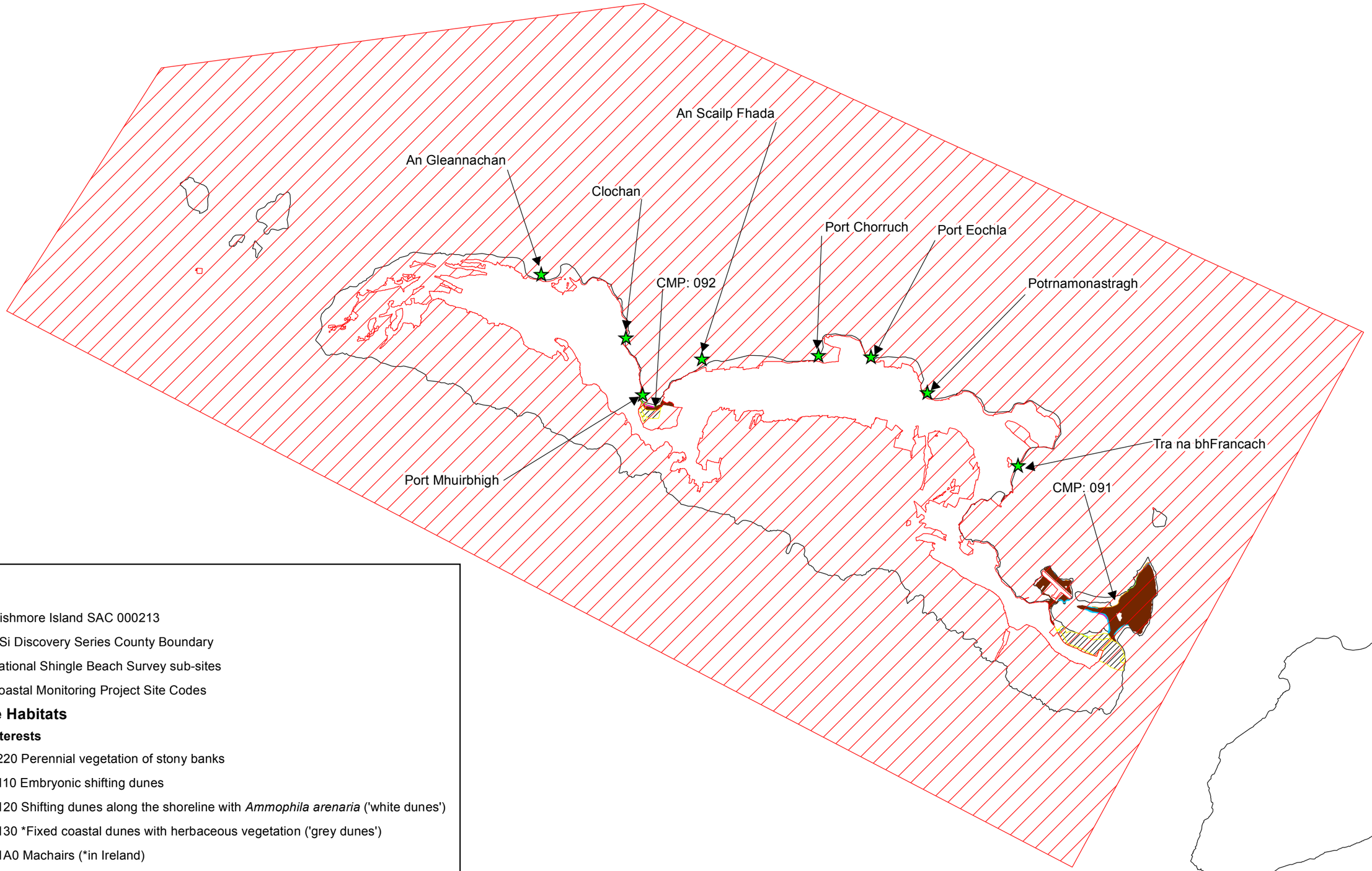
Date: Jan 2015



Legend

- Inishmore Island SAC 000213
- OSi Discovery Series County Boundary
- National Shingle Beach Survey sub-sites
- CMP: 091 Coastal Monitoring Project Site Codes

Sand Dune Habitats

Qualifying Interests

- 1220 Perennial vegetation of stony banks
- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- 2130 *Fixed coastal dunes with herbaceous vegetation ('grey dunes')
- 21A0 Machairs (*in Ireland)

Non Qualifying Interests

- 1210 Annual vegetation of drift lines

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MAP 7:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
SAND DUNE HABITATS &
PERENNIAL VEGETATION OF STONY BANKS
Map to be read in conjunction with the NPWS Conservation Objectives Document.

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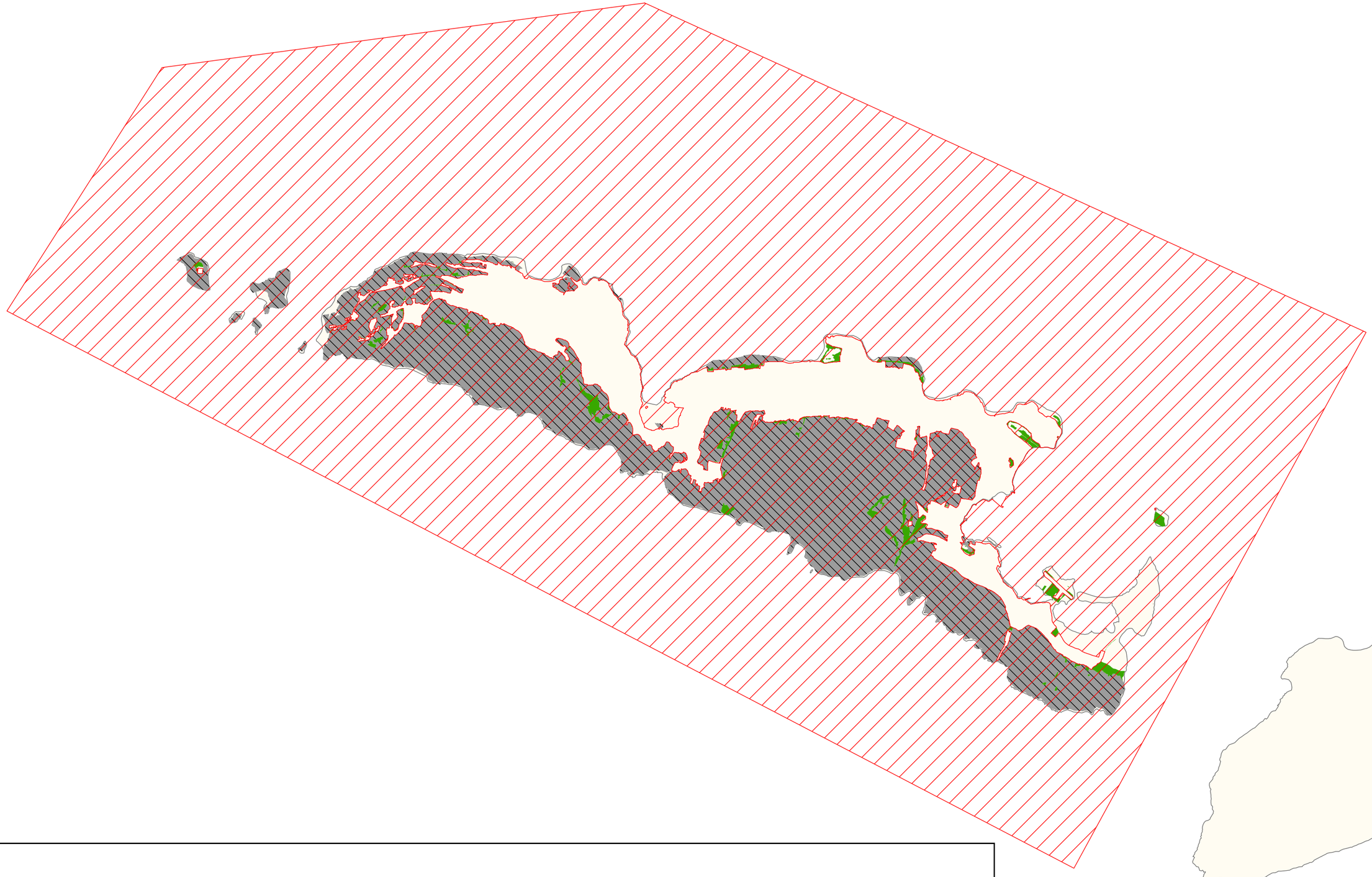

Legend

- Inishmore Island SAC 000213
- Potential Limestone pavements including associated habitats
- Semi Natural Grassland including 6210 / 6510 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometea) (*important orchid sites) / Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)
- OSi Discovery Series Coastal Boundary

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MAP 8:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
INDICATIVE LIMESTONE PAVEMENTS & GRASSLAND HABITATS

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

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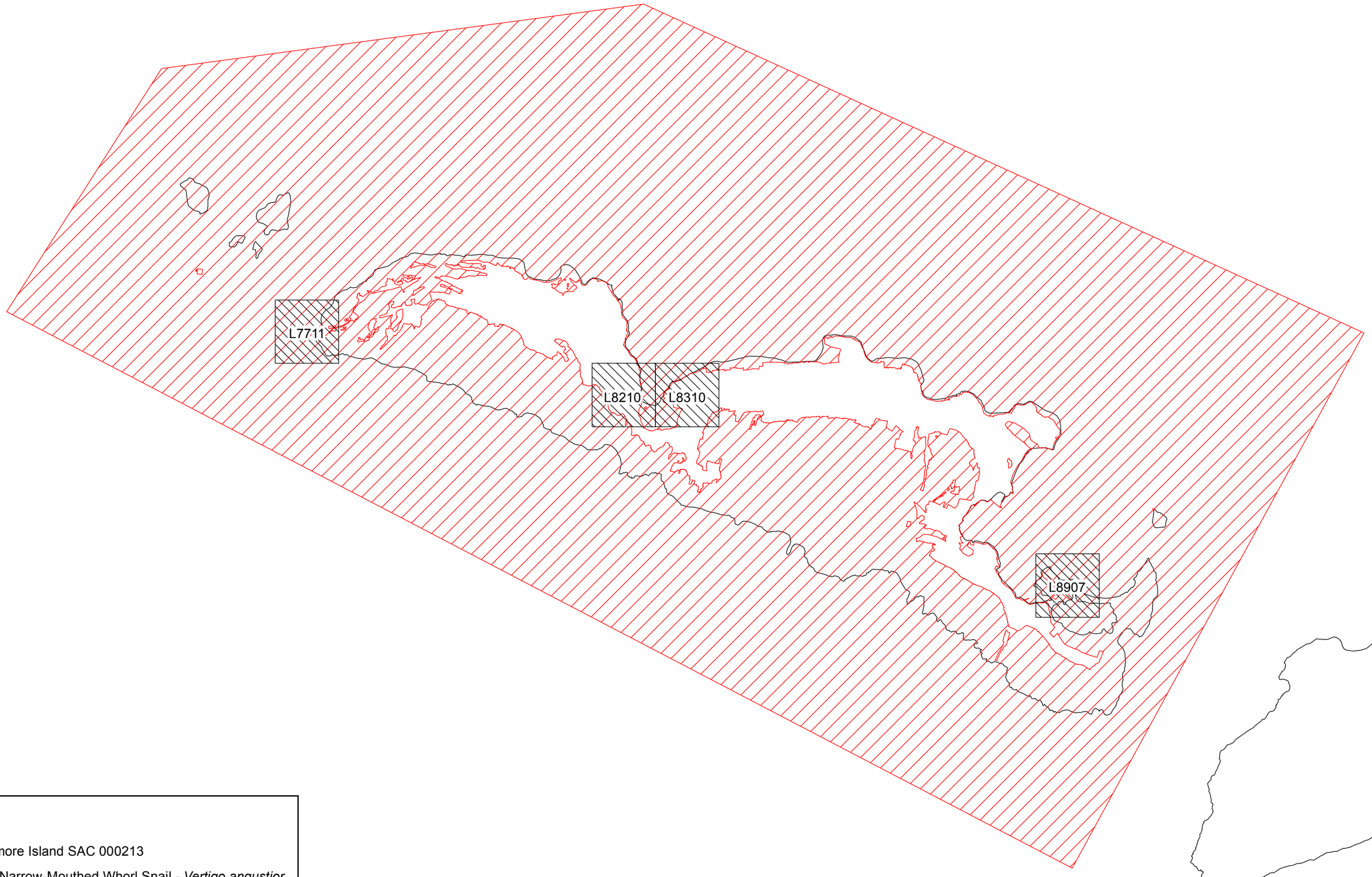

Legend

- Inishmore Island SAC 000213
- 1014 Narrow-Mouthed Whorl Snail - *Vertigo angustior*
- OSi Discovery Series County Boundary

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MAP 9:
INISHMORE ISLAND SAC
CONSERVATION OBJECTIVES
NARROW-MOUTHED WHORL SNAIL

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

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