# National Parks and Wildlife Service

**Conservation Objectives Series** 

## Inagh River Estuary SAC 000036



An Roinn Ealaíon, Oidhreachta, Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta

Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs



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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	es a priority habitat under the Habitats Directive			
000036	6 Inagh River Estuary SAC			
1310	لُظظَةِ {} هُتُعَمَّمُ اللهُ المُ			
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)			
1410	Mediterranean salt meadows (Juncetalia maritimi)			
2120	Shifting dunes along the shoreline with <i>O</i> ৄ { [ ] @			
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)E			

#### 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 :	Saltmarsh Monitoring Project 2006
Author :	McCorry, M.
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 :	2009
Title :	Saltmarsh monitoring project 2007-2008
Author :	McCorry, M.; Ryle, T.
Series :	Unpublished report to NPWS
Year :	2013
Title :	Monitoring survey of Annex I sand dune habitats in Ireland
Author :	Delaney, A.; Devaney, F.M.; Martin, J.M.; Barron, S.J.
Series :	Irish Wildlife Manual No. 75
Year :	2017
Title :	Inagh River Estuary SAC (site code: 36) Conservation objectives supporting document- coastal habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document

#### **Other References**

Year :	2008
Title :	The phytosociology and conservation value of Irish sand dunes
Author :	Gaynor, K.
Series :	Unpublished PhD thesis, National University of Ireland, Dublin

## Spatial data sources

Year :	Revision 2010
Title :	Saltmarsh Monitoring Project 2007-2008. Version 1
GIS Operations :	QIs selected; clipped to SAC boundary; overlapping regions with Coastal CO data investigated and resolved with expert opinion used
Used For :	1310, 1330, 1410 (map 2)
Year :	2009
Year : Title :	2009 Coastal Monitoring Project 2004-2006. Version 1
Year : Title : GIS Operations :	2009 Coastal Monitoring Project 2004-2006. Version 1 QIs selected; clipped to SAC boundary; overlapping regions with Saltmarsh CO data investigated and resolved with expert opinion used

#### 1310 Salicornia and other annuals colonising mud and sand

To restore the favourable conservation condition of *Salicornia* and other annuals colonising mud and sand in Inagh River Estuary 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 the sub-site mapped: Lahinch - 0.22ha. See map 2	Based on data from the Saltmarsh Monitoring Project (SMP) (McCorry, 2007; McCorry and Ryle, 2009). <i>Salicornia</i> and other annuals colonising mud and sand was surveyed and mapped at the sub-site Lahinch (site ID: SMP0008) to give a total estimated area of 0.22ha within Inagh River Estuary SAC. It is important to note that this may be an underestimate and further unsurveyed areas may be present within the SAC. See the Inagh River Estuary SAC conservation objectives supporting document for coastal habitats for further details
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes. See map 2 for known distribution	Based on data from McCorry (2007) and McCorry and Ryle (2009). <i>Salicornia</i> is an annual species, so its distribution can vary significantly from year to year. <i>Salicornia</i> mudflats habitat is located on the western side of the Inagh River in the north-west corner of the SAC. NB further unsurveyed areas may be present within the SAC. See the coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions	Based on data from McCorry (2007) and McCorry and Ryle (2009). Sediment supply is particularly important for this pioneer saltmarsh community, as the distribution of this habitat depends on accretion rates. See the coastal habitats backing document for further details
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes including erosion and succession	Based on data from McCorry (2007) and McCorry and Ryle (2009). Creeks deliver sediment throughout the saltmarsh system. At Lahinch, the salt pan structure is relatively well-developed and some of the pans contain patches of glasswort ( <i>Salicornia</i> spp.). See the coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	Based on data from McCorry (2007) and McCorry and Ryle (2009). This pioneer saltmarsh community requires regular tidal inundation. See the 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 McCorry (2007) and McCorry and Ryle (2009). See the coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the coastal habitats supporting document for further details
Vegetation structure: vegetation cover	Percentage cover at a representative number of monitoring stops	Maintain more than 90% of the area outside of creeks vegetated	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the coastal habitats supporting document for further details.
Vegetation composition: typical species and sub- communities	Percentage cover	Maintain the presence of species-poor communities with typical species listed in McCorry and Ryle (2009)	Based on data from McCorry (2007) and McCorry and Ryle (2009). The central part of the <i>Salicornia</i> mudflats area in the SAC is colonised by glassworts ( <i>Salicornia</i> spp.) on muddy sand with occasional annual sea-blite ( <i>Suaeda maritima</i> ) and common saltmarsh-grass ( <i>Puccinellia maritima</i> ). See the coastal habitats supporting document for further details

Version 1

Vegetation<br/>composition:HectaresThere is no record of<br/>common cordgrassBased on data from McCorry (2007) and McCorry<br/>and Ryle (2009). Common cordgrass (*Spartina*<br/>*anglica*) was not recorded within the SAC. See the<br/>coastal habitats supporting document for further<br/>details

#### 1330

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Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

To restore the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae) in Inagh River Estuary 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 the sub-site mapped: Lahinch - 49.47ha. See map 2	Based on data from the Saltmarsh Monitoring Project (SMP) (McCorry, 2007; McCorry and Ryle, 2009). The sub-site Lahinch (site ID: SMP0008) that supports Atlantic salt meadows (ASM) was mapped to give a total eatimated area of 49.37ha within Inagh River Estuary SAC. NB further unsurveyed areas may be present within the SAC. See the Inagh River Estuary SAC conservation objectives supporting document for coastal habitats for further details
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes. See map 2 for known distribution	Based on data from McCorry (2007) and McCorry and Ryle (2009). The ASM habitat is mainly situated along the two river channels with the largest sections between the Lahinch Golf Course and the Inagh River. NB further unsurveyed areas may be present within the SAC. See the coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain natural circulation of sediments and organic matter, without any physical obstructions	Based on data from McCorry (2007) and McCorry and Ryle (2009). Natural erosion and accretion is occurring along the Inagh River. The main channel has shifted its position, particularly in the north-west section where it joins the Dealagh River. See the coastal habitats supporting document for further details
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes including erosion and succession	Based on data from McCorry (2007) and McCorry and Ryle (2009). The ASM in the SAC generally has a complicated topography and the creeks and salt pans are well-developed, although some creeks have been modified or affected by old drainage works. See the coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the 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 McCorry (2007) and McCorry and Ryle (2009). The vegetation of the ASM areas in the SAC consists of mid and mid-upper saltmarsh plant communities. Several different ASM vegetation communities are present and zonation is present depending on elevation. The most notable transitions of ASM to other habitats are those to fixed dunes. See the coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from McCorry (2007) and McCorry and Ryle (2009). The sward height of the ASM in the SAC is generally low due to grazing. See the coastal habitats supporting document for further details
Vegetation structure: vegetation cover	Percentage cover at a representative number of monitoring stops	Maintain more than 90% of the area outside of creeks vegetated	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the 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 McCorry and Ryle (2009)	Based on data from McCorry (2007) and McCorry and Ryle (2009). The vegetation of the ASM areas in the SAC is dominated by mid and mid-upper saltmarsh plant communities. The mid-upper saltmarsh is dominated by saltmarsh rush ( <i>Juncus</i> <i>gerardii</i> ) and red fescue ( <i>Festuca rubra</i> ) with frequent sea plantain ( <i>Plantago maritima</i> ). Common scurvygrass ( <i>Cochlearia officinalis</i> ) is also present. See the coastal habitats supporting document for further details

Vegetation<br/>composition:HectaresThere is no record of<br/>common cordgrassBased on data from McCorry (2007) and McCorry<br/>and Ryle (2009). Common cordgrass (*Spartina*<br/>*anglica*) was not recorded within the SAC. See the<br/>coastal habitats supporting document for further<br/>details

#### 1410 Mediterranean salt meadows (Juncetalia maritimi)

To restore the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in Inagh River Estuary 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 the sub-site mapped: Lahinch - 64.15ha. See map 2	Based on data from the Saltmarsh Monitoring Project (SMP) (McCorry, 2007; McCorry and Ryle, 2009). The sub-site Lahinch (site ID: SMP0008) that supports Mediterranean salt meadows (MSM) was mapped to give a total estimated area of 64.15ha within Inagh River Estuary SAC. NB further unsurveyed areas may be present within the SAC. See the Inagh River Estuary SAC conservation objectives supporting document for coastal habitats for further details
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes. See map 2 for known distribution	Based on data from McCorry (2007) and McCorry and Ryle (2009). There are large expanses of MSM habitat in the north-east section of the SAC. NB further unsurveyed areas may be present within the SAC. See the coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain natural circulation of sediments and organic matter, without any physical obstructions	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the coastal habitats supporting document for further details
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes including erosion and succession	Based on data from McCorry (2007) and McCorry and Ryle (2009). There is a well-developed creek and pan structure in the MSM habitat in the SAC. See the coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	Based on data from McCorry (2007) and McCorry and Ryle (2009). MSM is found high up in the saltmarsh but requires occasional tidal inundation. Much of this habitat in the SAC has been modified in the past by drainage. See the 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 McCorry (2007) and McCorry and Ryle (2009). Different vegetation zones are not particularly evident in the MSM habitat as it is generally defined by the presence of sea rush ( <i>Juncus maritimus</i> ). However, plant community zonation is evident where the MSM transitions to terrestrial habitats along slopes. See the coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation in the sward	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the coastal habitats supporting document for further details
Vegetation structure: vegetation cover	Percentage cover at a representative number of monitoring stops	Maintain more than 90% of the area outside of creeks vegetated	Based on data from McCorry (2007) and McCorry and Ryle (2009). See the 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 characteristic species listed in McCorry and Ryle (2009)	Based on data from McCorry (2007) and McCorry and Ryle (2009). This MSM habitat in the SAC is generally dominated by a dense cover of sea rush ( <i>Juncus maritimus</i> ). See the coastal habitats supporting document for further details
Vegetation composition: negative indicator species - Spartina anglica	Hectares	There is no record of common cordgrass ( <i>Spartina anglica</i> ) in the SAC and its establishment should be prevented	Based on data from McCorry (2007) and McCorry and Ryle (2009). Common cordgrass ( <i>Spartina</i> <i>anglica</i> ) was not recorded within the SAC. See the coastal habitats supporting document for further details

#### 2120

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

To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Inagh River Estuary 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 the sub-site mapped: Lahinch - 0.001ha. See map 3	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Shifting dunes along the shoreline with <i>Ammophila arenaria</i> was mapped at the sub-site Lahinch (CMP site ID: 085) to give a total estimated area of 0.001ha within Inagh River Estuary SAC. The habitat is very difficult to measure in view of its dynamic nature. See the Inagh River Estuary SAC conservation objectives supporting document for coastal habitats for further details
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes. See map 3 for known distribution	Based on data from Ryle et al. (2009). See the 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). Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Marram grass ( <i>Ammophila arenaria</i> ) reproduces vegetatively and requires constant accretion of fresh sand to maintain active growth encouraging further accretion. The main activities affecting the sand dune sediment supply at Lahinch are recreational and coastal protection activities. See the 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). A range of habitats occurs within Inagh River Estuary SAC, ranging from the coastal dune system to an estuarine channel and its associated saltmarsh habitat. See the coastal habitats supporting document for further details
Vegetation composition: plant health of dune grasses	Percentage cover	More than 95% of marram grass ( <i>Anmophila</i> <i>arenaria</i> ) and/or lyme- grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). See the 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 ( <i>Ammophila</i> <i>arenaria</i> ) and/or lyme- grass ( <i>Leymus arenarius</i> )	Based on data from Ryle et al. (2009). See the 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 Gaynor (2008) and 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 ( <i>Hippophae rhamnoides</i> ) should be absent or effectively controlled. See the 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 Inagh River Estuary SAC, which is defined by the following list of attributes and targets:

Attribute	Measure Ta	Target	Notes	
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For the sub-site mapped: Lahinch - 16.78ha. See map 3	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Fixed coastal dunes with herbaceous vegetation was mapped at the sub-site Lahinch (CMP site ID: 085) to give a total estimated area of 16.78ha within Inagh River Estuary SAC. See the Inagh River Estuary SAC conservation objectives supporting document for coastal habitats for further details	
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes. See map 3 for known distribution	Based on data from Ryle et al. (2009). See the 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. The main activities affecting the sand dune sediment supply at Lahinch are recreational and coastal protection activities (Ryle et al., 2009). See the 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). A range of habitats occurs within Inagh River Estuary SAC ranging from the coastal dune system to an estuarine channel and its associated saltmarsh habitats. See the 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). The fixed dune habitat features large blowouts caused by past sand extraction, which are exacerbated by trampling by cattle. See the coastal habitats supporting document for further details	
Vegetation structure: sward height	Centimetres	Maintain structural variation within sward	Based on data from Ryle et al. (2009). See the 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 Delaney et al. (2013)	The typical species found in the fixed dune system in the SAC include kidney vetch ( <i>Anthyllis</i> <i>vulneraria</i> ), sand sedge ( <i>Carex arenaria</i> ), glaucous sedge ( <i>C. flacca</i> ), moth hawk's-beard ( <i>Crepis</i> <i>capillaris</i> ), eyebright ( <i>Euphrasia officinalis</i> agg.), red fescue ( <i>Festuca rubra</i> ), lady's bedstraw ( <i>Galium</i> <i>verum</i> ), cat's ear ( <i>Hypochaeris radicata</i> ), common bird's-foot trefoil ( <i>Lotus corniculatus</i> ), red bartsia ( <i>Odontites verna</i> ), ribwort plantain ( <i>Plantago</i> <i>lanceolata</i> ), biting stonecrop ( <i>Sedum acre</i> ), white clover ( <i>Trifolium repens</i> ), germander speedwell ( <i>Veronica chamaedrys</i> ) and the mosses <i>Rhytidiadelphus squarrosus</i> and <i>Syntrichia ruralis</i> subsp. <i>ruraliformis</i> (Ryle et al., 2009). See the coastal habitats supporting document for further details	

Vegetation composition: negative indicator species (including <i>Hippophae</i> <i>rhamnoides</i> )	Percentage cover	Negative indicator species (including non-native species) to represent less than 5% cover	Based on data from Gaynor (2008) and 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 ( <i>Hippophae rhamnoides</i> ) should be absent or effectively controlled. Agricultural weeds are common throughout the fixed dune area in the SAC. Negative indicators recorded include creeping thistle ( <i>Cirsium arvense</i> ), bramble ( <i>Rubus fruticosus</i> agg.), common ragwort ( <i>Senecio jacobaea</i> ) and common nettle ( <i>Urtica dioica</i> ). See the 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 the coastal habitats supporting document for further details



		SMP Site Code: SMP0008
Legend   Inagh River Estuary SAC 000036   Saltmarsh Monitoring Project Survey Area   Saltmarsh Habitats   1310 Salicornia and other annuals colonising mud and sand   1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)   1330 / 1410 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) / Medit   1410 Mediterranean salt meadows (Juncetalia maritimi)   OSi Discovery Series County Boundary	erranean salt meadows ( <i>Juncetalia maritimi</i> )	
An Roinn Ealaíon, Oidhreachta, Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs MAP 2: INAGH RIVER ESTUARY SAC CONSERVATION OBJECTIVES SALTMARSH HABITATS	SITE CODE: SAC 000036 version 3. CO. CLARE 0 0.25 0.5 0.75 1 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 0059216. © Ordnance Survey of Ireland Government of Ireland. Níl sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059216. © Suirbhéarachta Ordonáis na hÉireann Rialtas na hÉireann.

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





Legend Inagh River Estuary SA Coastal Monitoring Pro Qualifying Interests 2120 Shifting dunes ald 2130 * Fixed dunes wi Non Qualifying Interests 2110 Embryonic shifting 1210 Annual vegetation OSi Discovery Series O	AC 000036 bject Survey Area ong the shoreline with <i>Ammophila arenaria</i> (`white dunes`) th herbaceous vegetation (`grey dunes`) <b>5</b> g dunes n of drift lines County Boundary		
An Roinn Ealaíon, Oidhreachta, Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	MAP3: INAGH RIVER ESTUARY SAC CONSERVATION OBJECTIVES SAND DUNE HABITATS Map to be read in conjunction with the NPWS Conservation Objectives Document.	SITE CODE: SAC 000036 version 3. CO. CLARE	The mapped boundaries are of an indicative and general nature only. Bou Ordnance Survey of Ireland Licence No EN 0059216. © Ordnanc Níl sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta. Féad comharthaithe. Suirbhéarachta Ordonáis na hÉireann Ceadúnas Uimh EN 0059216.

