

NPWS

**Lough Nagreany Dunes SAC
(site code: 000164)**

**Conservation objectives supporting document -
coastal habitats**

Version 1 - supplement 1

July 2026

IMPORTANT: This supplement, published in 2026, includes details relating to the EU habitats **2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")**, **2190 Humid dune slacks and 21A0 Machairs (* in Ireland)** which were added as Qualifying Interests for the site after the Site-Specific Conservation Objectives (Version 1) were published. This document should be read in conjunction with the Version 2 Site-Specific Conservation Objectives (NPWS, 2026), and with the Conservation objectives supporting document - Coastal habitats Version 1 (NPWS, 2017). Any references to these habitats in previously published Site-specific Conservation Objectives (SSCO), or SSCO supporting documents, including the mapping, are to be considered **superseded** by these updates.

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1. Introduction

2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"), 2190 Humid dune slacks and 21A0 Machairs (* in Ireland) were added as Qualifying Interests to Lough Nagreany Dunes SAC (site code 000164) after the Site-Specific Conservation Objectives (Version 1) were published. This document sets out the SSCOs for the newly listed Qualifying Interests for the site and acts as a supplement to the original SSCO Supporting Document.

2. Coastal habitats

2.1 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")

2.1.1 Site description of habitat

2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes") occur along the full extent of the seaward boundary of the dunes in the SAC, and have recently accreted in some areas.

2.1.2 Overall objective

The overall objective for '*Shifting dunes along the shoreline with Ammophila arenaria* ("white dunes")' in Lough Nagreany Dunes SAC (site code 000164) is to '*restore the Favourable conservation condition*'.

This objective is based on an assessment of the recorded condition of the habitat(s) under a range of attributes and targets. The assessment is divided into three main headings: (a) Area (b) Range and (c) Structure and Functions. This conservation objective applies to the total extent of this habitat within the SAC, including but not limited to the mapped areas of this habitat.

2.1.3 Area

Habitat area

Coastal habitats are generally dynamic and increase and decrease in area due to natural processes. These natural changes are not taken into account in conservation status assessments. Changes associated with human activities including destruction and restoration do contribute to the assessment of conservation status.

The area recorded for 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes") is 1.74ha (Ryle *et al.*, 2009; Delaney *et al.*, 2013).

Loss of habitat has occurred at the site due to human activities (Ryle *et al.*, 2009). This is primarily due to trampling by people and cattle in the north-east of the dunes.

Target: Area stable or increasing, subject to natural processes, including erosion and succession.

2.1.4 Range

Habitat distribution

There are three distinct subsites in the SAC, each of which contains 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"): Lough Nagreany in the south-west, Doaghmore, and Gortnatraw in the north-west. Habitat 2120 forms a continuous band close to the beach at Lough Nagreany and is partly protected by 2110 Embryonic shifting dunes (Delaney *et al.*, 2013). In Doaghmore the habitat extends the length of the strand and in Gortnatraw the 2120 habitat runs across the seaward edge of the Machair (Ryle *et al.*, 2009).

Target: No decline in the distribution of this habitat, unless it is the result of natural processes.

2.1.5 Structure and Functions

Structure and Functions for Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes") are assessed on the basis of:

Physical structure: functionality and sediment supply

Target: Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs. Physical obstructions that have been in place and are unchanged since prior to 1994 are excluded from this target, unless they have a current adverse impact on sediment circulation.

Disturbance

Target: No more than 20% of the habitat should be subject to disturbance e.g. trampling, vehicle damage, removal of substrate.

Flowering and fruiting of any positive indicator species

Target: Present in 40% or more of stops.

Vegetation composition: typical species (positive indicators)

Target: At least one individual species occurs with a frequency of more than 40% of stops.

Vegetation composition: native negative indicator species

Target: No negative species occurs at a frequency of more than 60% of stops and combined cover of all negative species across the habitat is 5% or less and highest % cover of any negative species within any stop is 25% or less.

Vegetation composition: non-native species

Target: No non-native species occurs at a frequency of more than 20% of stops and no evidence that % cover is increasing

Indicators of local distinctiveness: site-specific target features (including rare and notable species)

Target: No evidence of decline since designation.

The Structure and functions at Lough Nagreany and Doaghmore were found to be in good condition during assessments. At Gortnatraw, parts of the habitat lacked healthy marram stands. The Future prospects were threatened by trampling and the overall condition of the habitat in the SAC is Unfavourable (Ryle *et al.*, 2009).

2.2 2190 Humid dune slacks

2.2.1 Site description of habitat

2190 Humid dune slacks in Lough Nagreany are located in fields managed as pasture. They are close to rocky hillsides on their landward side and the water table in the south-western slacks was close to the surface when surveyed (Delaney *et al.*, 2013).

2.2.2 Overall objective

The overall objective for 'Humid dune slacks' in Lough Nagreany Dunes SAC (site code 000164) is to 'restore the Favourable conservation condition'.

This objective is based on an assessment of the recorded condition of the habitat(s) under a range of attributes and targets. The assessment is divided into three main headings: (a) Area (b) Range and (c) Structure and Functions. This conservation objective applies to the total extent of this habitat within the SAC, including but not limited to the mapped areas of this habitat.

2.2.3 Area

Habitat area

Coastal habitats are generally dynamic and increase and decrease in area due to natural processes. These natural changes are not taken into account in conservation status assessments. Changes associated with human activities including destruction and restoration do contribute to the assessment of conservation status.

The area recorded for 2190 Humid dune slacks is 1.51ha (Delaney *et al.*, 2013).

No loss of habitat due to human activities has been observed on the site.

Target: Area stable or increasing, subject to natural processes, including erosion and succession.

2.2.4 Range

Habitat distribution

The 2190 Humid dune slacks habitat occurs at Lough Nagreany and Doaghmore in the centre and west of the SAC.

Target: No decline in the distribution of this habitat, unless it is the result of natural processes.

2.2.5 Structure and Functions

Structure and Functions for Humid dune slacks are assessed on the basis of:

Physical structure: functionality and sediment supply

Target: Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs. Physical obstructions that have been in place and are unchanged since prior to 1994 are excluded from this target, unless they have a current adverse impact on sediment circulation.

Disturbance

Target: No more than 20% of the habitat should be subject to disturbance *e.g.* trampling, vehicle damage, removal of substrate.

Physical structure: hydrological and flooding regime

Target: Hydrological regime supports typical seasonal fluctuations.

Bare ground

Target: Bare ground should be present but should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground.

Vegetation composition: typical species (positive indicators)

Target: At least four of the positive species occur with a frequency of more than 40% of stops and another two species occur with a frequency of more than 20% of stops and every stop contains at least three positive species.

Vegetation composition: bryophytes

Target: Present in more than 20% of stops.

Vegetation composition: native negative indicator species

Target: No negative indicator species occurs at a frequency of more than 60% of stops and the total combined cover of all negative indicator species across the habitat is 5% or less and highest % cover of any negative indicator species within any stop is 25% or less.

Vegetation composition: non-native species

Target: No non-native species occurs at a frequency of more than 20% of stops and no evidence that % cover has increased.

Vegetation composition: trees/scrub

Target: Present at no more than 40% of stops and combined cover of 5% or less.

Vegetation composition: forb:grass ratio

Target: Forb (herbaceous flowering plant) cover over 30% and grass cover below 70%.

Vegetation composition: cover of *Salix repens*

Target: Less than 40% cover of *Salix repens*.

Indicators of local distinctiveness: site-specific target features (including rare and notable species)

Target: No evidence of decline since designation.

The habitat was in good condition when it was last surveyed at Doaghmore (Ryle *et al.*, 2009) but was not in good condition at Lough Nagreany during the survey by Delaney *et al.* (2013). This was because of low broad-leaved herb cover, a high proportion of tall grasses and high Creeping Willow (*Salix repens*) cover (36%). The Future prospects were assessed as good but the overall habitat condition was considered Unfavourable.

2.3 21A0 Machairs (* in Ireland)**2.3.1 Site description of habitat**

The 21A0 Machairs habitat at Lough Nagreany is located in a low-lying plain between the hills to the east and west, fixed dunes to the north and wet grassland to the south. The water table is very close to the surface and the species recorded are indicative of damp conditions with Creeping Bent (*Agrostis stolonifera*), Common Sedge (*Carex nigra*) and Marsh Pennywort (*Hydrocotyle vulgaris*) being recorded alongside Daisy (*Bellis perennis*), Ribwort Plantain (*Plantago lanceolata*) and Lady's Bedstraw (*Galium verum*) (Delaney *et al.*, 2013). The Machair at Gortnatraw is somewhat undulating and forms the seaward boundary of the dunes in some areas (Ryle *et al.*, 2009).

2.3.2 Overall objective

The overall objective for '*Machairs**' in Lough Nagreany Dunes SAC (site code 000164) is to 'restore the Favourable conservation condition'.

This objective is based on an assessment of the recorded condition of the habitat(s) under a range of attributes and targets. The assessment is divided into three main headings: (a) Area (b) Range and (c) Structure and Functions. This conservation objective applies to the total extent of this habitat within the SAC, including but not limited to the mapped areas of this habitat.

2.3.3 Area

Habitat area

Coastal habitats are generally dynamic and increase and decrease in area due to natural processes. These natural changes are not taken into account in conservation status assessments. Changes associated with human activities including destruction and restoration do contribute to the assessment of conservation status.

The area recorded for 21A0 Machairs (* in Ireland) is 25.43ha (Delaney *et al.*, 2013).

No loss of habitat due to human activities has been observed.

Target: Area stable or increasing, subject to natural processes, including erosion and succession.

2.3.4 Range

Habitat distribution

There are two areas of Machair which are located to the east (Gortnatraw) and west (Lough Nagreany) of the site.

Target: No decline in the distribution of this habitat, unless it is the result of natural processes.

2.3.5 Structure and Functions

Structure and Functions for Machairs* are assessed on the basis of:

Physical structure: functionality and sediment supply

Target: Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs. Physical obstructions that have been in place and are unchanged since prior to 1994 are excluded from this target, unless they have a current adverse impact on sediment circulation.

Disturbance

Target: No more than 20% of the habitat should be subject to disturbance e.g. trampling, vehicle damage, removal of substrate.

Physical structure: hydrological and flooding regime

Target: Hydrological regime supports typical seasonal fluctuations.

Bare ground

Target: Bare ground is present but does not exceed 5% of Machair habitat, subject to natural processes.

Flowering and fruiting of any positive indicator species

Target: Present in 40% or more of stops.

Vegetation structure: sward height

Target: Sward height of at least 8cm in July/August.

Vegetation composition: typical species (positive indicators)

Target: At least six of the positive species occur with a frequency of more than 20% of stops and every stop contains at least three positive species.

Vegetation composition: bryophytes

Target: Minimum cover of 1% at every stop.

Vegetation composition: native negative indicator species

Target: No negative indicator species occurs at a frequency of more than 40% of stops and the total combined cover of all negative indicator species across the habitat is 5% or less and highest % cover of any negative indicator species within any stop is 25% or less.

Vegetation composition: non-native species

Target: No non-native species occurs at a frequency of more than 20% of stops and no evidence that % cover is increasing.

Vegetation composition: scrub/trees

Target: No more than 5% cover or under control.

Indicators of local distinctiveness: site-specific target features (including rare and notable species)

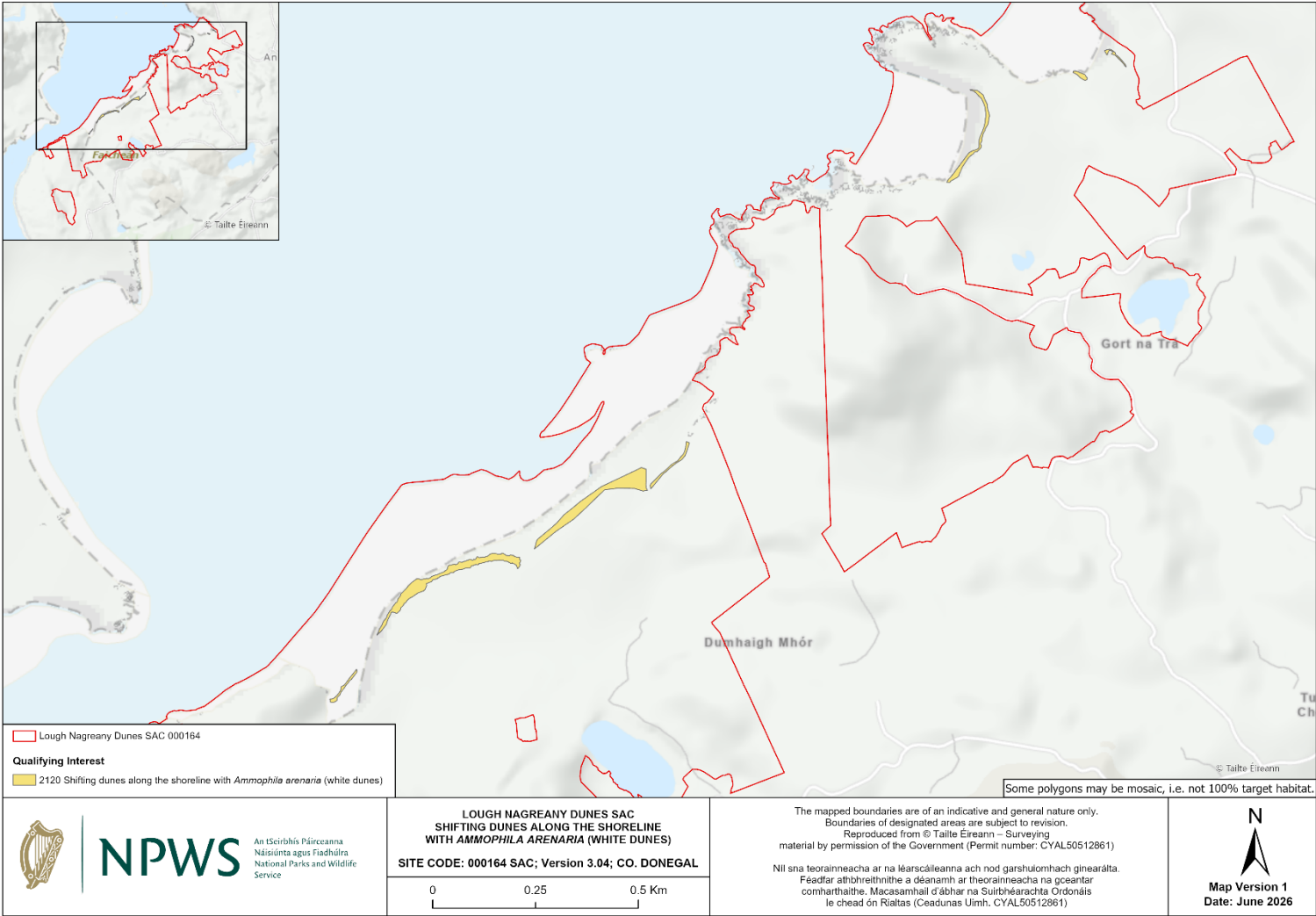
Target: No evidence of decline since designation.

The Structure and functions of the 21A0 Machair habitat are affected by overgrazing and agricultural activities. Negative indicators that have been recorded in the habitat include Ragwort (*Senecio jacobaea*), Perennial Rye Grass (*Lolium perenne*) and Spear Thistle (*Cirsium vulgare*). The Future prospects were not good and the overall condition in both areas of Machair was assessed as Unfavourable (Delaney *et al.*, 2013; Ryle *et al.*, 2009).

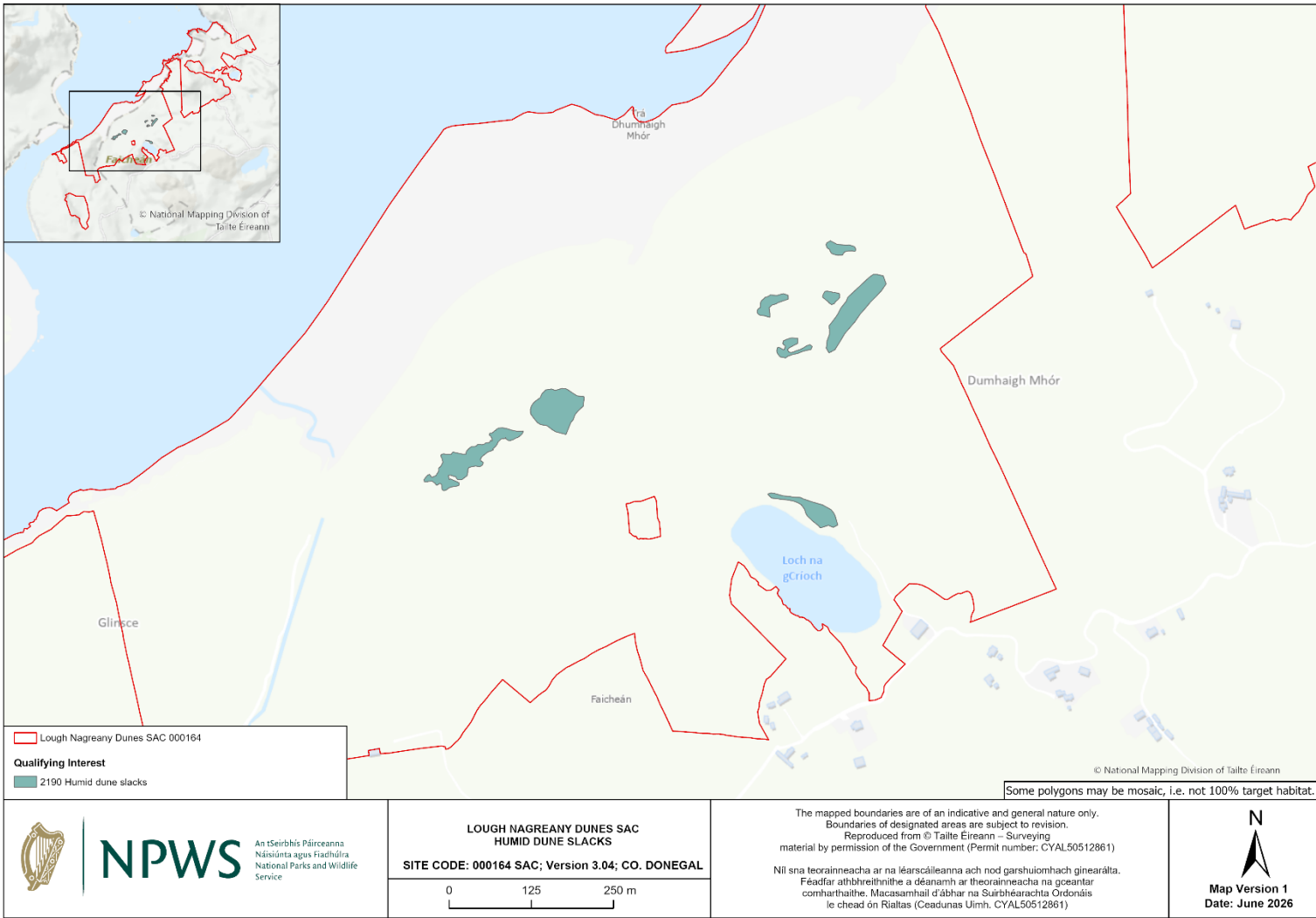
3. References

- Barron, S., Delaney, A., Perrin, P., Martin, J. and O'Neill, F. (2011) National survey and assessment of the conservation status of Irish sea cliffs. Irish Wildlife Manuals, No. 53. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- Brophy, J.T., Perrin, P.M., Penk, M.R., Devaney, F.M. and Leyden, K.J. (2019) Saltmarsh Monitoring Project 2017-2018. Irish Wildlife Manuals, No. 108. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.
- Browne, A. (2005) National inventory of sea cliffs and coastal heaths. Unpublished report to the National Parks and Wildlife Service, Dublin.
- Delaney, A., Devaney, F.M., Martin, J.R. and Barron, S.J. (2013) Monitoring survey of Annex I sand dune habitats in Ireland. Irish Wildlife Manuals, No. 75. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- European Commission (2013) Interpretation Manual of European Union Habitats – EUR 28. DG Environment - Nature and Biodiversity, Brussels.
- Fossitt, J.A. (2000) A guide to habitats in Ireland. The Heritage Council, Kilkenny.
- JNCC (2004) Common standards and monitoring guidance for maritime cliff and slope habitats. Joint Nature Conservation Committee, Peterborough, UK.
- Martin, J.R., Daly, O.H. and Devaney F.M. (2017) Survey and assessment of vegetated shingle and associated habitats at 30 coastal sites. Volume 1: Main report. Irish Wildlife Manuals, No. 98. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin.
- McCorry, M. and Ryle, T. (2009) Saltmarsh Monitoring Project 2007-2008. Unpublished report to the National Parks and Wildlife Service, Dublin.
- Moore, D. and Wilson, F. (1999) National Shingle Beach Survey of Ireland 1999. Unpublished report to NPWS, Dublin.
- NPWS (2013) The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.0. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- NPWS (2017) Lough Nagreany Dunes SAC (site code 000164) Conservation objectives supporting document – Coastal habitats V1. Conservation Objectives Supporting Document Series. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Dublin, Ireland.
- Perrin, P.M., Waldren, S., Penk, M.R. and O'Neill, F.H. (2017) Saltmarsh Function and Human Impacts in Relation to Ecological Status (SAMFHIREs). EPA Research Report, Wexford, Ireland.
- Ryle, T., Murray, A., Connolly, K. and Swann, M. (2009) Coastal Monitoring Project 2004-2006. Unpublished report to the National Parks and Wildlife Service, Dublin.
- Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. and Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

Appendix 1 – Distribution map of Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”) in Lough Nagreany Dunes SAC (site code 000164)



Appendix 2 – Distribution map of Humid dune slacks in Lough Nagreany Dunes SAC (site code 000164)



Appendix 3 – Distribution map of Machairs* in Lough Nagreany Dunes SAC (site code 000164)

