

National Parks and Wildlife Service

Conservation Objectives Series

Carrowmore Lake Complex SAC 000476



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 a priority habitat under the Habitats Directive

000476	Carrowmore Lake Complex SAC
1393	Slender Green Feather-moss <i>Drepanocladus vernicosus</i>
1528	Marsh Saxifrage <i>Saxifraga hirculus</i>
7130	Blanket bogs (* if active bog)
7150	Depressions on peat substrates of the Rhynchosporion

Please note that this SAC overlaps with Carrowmore Lake SPA (004052) and adjoins Slieve Fyagh Bog SAC (000542). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping and adjoining sites as appropriate.

Supporting documents, relevant reports & publications

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

NPWS Documents

Year :	1987
Title :	A survey to locate blanket bogs of scientific interest in County Mayo. Part I
Author :	Foss, P.; McGee, E.
Series :	A report commissioned by the Wildlife Service
Year :	1989
Title :	Survey to locate blanket bogs of scientific interest in Mayo. Part II
Author :	Douglas, C.; Garvey, L.; Kelly, L.; O'Sullivan, A.; Van Doorsleer, L.
Series :	A report commissioned by the Wildlife Service
Year :	2012
Title :	Ireland Red List No. 8: Bryophytes
Author :	Lockhart, N.; Hodgetts, N.; Holyoak, D.
Series :	Ireland Red List series, NPWS
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 Manual No. 79
Year :	2015
Title :	Monitoring recommendations for Marsh Saxifrage (<i>Saxifraga hirculus</i> L.) in the Republic of Ireland
Author :	Muldoon, C.S.; Waldren, S.; Lynn, D.
Series :	Irish Wildlife Manual No. 88
Year :	2015
Title :	Monitoring methods for <i>Hamatocaulis vernicosus</i> (Mitt.) Hedenäs (Slender green feather-moss) in the Republic of Ireland
Author :	Campbell, C.; Hodgetts, N.; Lockhart, N.
Series :	Irish Wildlife Manual No. 91
Year :	2016
Title :	Ireland Red List No. 10: Vascular Plants
Author :	Wyse Jackson, M.; FitzPatrick, Ú.; Cole, E.; Jebb, M.; McFerran, D.; Sheehy Skeffington, M.; Wright, M.
Series :	Ireland Red Lists series, NPWS
Year :	2017
Title :	Carrowmore Lake Complex SAC (site code: 476) Conservation objectives supporting document- blanket bogs and associated habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document

Other References

Year :	1989
Title :	The genera <i>Scorpidium</i> and <i>Hamatocaulis</i> , gen. nov., in northern Europe
Author :	Hedenäs, L.
Series :	Lindbergia, 15: 8-36

Year : 2011
Title : Conservation biology of *Saxifraga hirculus* L. in Ireland
Author : Muldoon, C.S.
Series : Unpublished Ph.D. Thesis, Trinity College Dublin

Year : 2013
Title : Conservation of selected legally protected and Red Listed bryophytes in Ireland
Author : Campbell, C.
Series : Unpublished Ph.D. Thesis, Trinity College Dublin

Spatial data sources

Year :	2017
Title :	NPWS rare and threatened species database
GIS Operations :	Datasets created from spatial references in database records. Expert opinion used as necessary to resolve any issues arising
Used For :	1393, 1528 (maps 3 and 4)

Conservation Objectives for : Carrowmore Lake Complex SAC [000476]

7130 Blanket bogs (* if active bog)

To restore the favourable conservation condition of Blanket bogs (* if active bog) in Carrowmore Lake Complex 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	Blanket bog has not been mapped in detail for Carrowmore Lake Complex SAC but from current available data the total area of the qualifying habitat is estimated to be approximately 2,285ha, covering 63% of the SAC (NPWS internal files). Further details on this and the following attributes can be found in the Carrowmore Lake Complex SAC conservation objectives supporting document for blanket bogs and associated habitats
Habitat distribution	Occurrence	No decline, subject to natural processes	Blanket bog habitat lies east of Carrowmore Lake. Three large areas of blanket bog are incorporated into the SAC at Glenturk, Carrowmore (or Glencullin) and Largan More. Further information can be found in Foss and McGee (1987), Douglas et al. (1989), NPWS internal files and the blanket bogs and associated habitats supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	See the blanket bogs and associated habitats supporting document for further details
Ecosystem function: peat formation	Active blanket bog as a proportion of the total area of Annex I blanket bog habitat	At least 99% of the total Annex I blanket bog area is active	See the blanket bogs and associated habitats supporting document for further details
Ecosystem function: hydrology	Flow direction, water levels, occurrence of drains and erosion gullies	Natural hydrology unaffected by drains and erosion	Further details and a brief discussion of restoration potential is presented in the blanket bogs and associated habitats supporting document
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	A variety of blanket bog vegetation communities have been recorded in this SAC (Foss and McGee, 1987; Douglas et al., 1989; NPWS internal files), four of which correspond to communities recorded in the National Survey of Upland Habitats and listed in the provisional list of vegetation communities described in Perrin et al. (2014). Further information on vegetation communities associated with this habitat is presented in Perrin et al. (2014)
Vegetation composition: positive indicator species	Number of species at a representative number of 2m x 2m monitoring stops	Number of positive indicator species present at each monitoring stop is at least seven	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is also presented
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of bryophytes or lichens, excluding <i>Sphagnum fallax</i> , at least 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: potential dominant species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of each of the potential dominant species less than 75%	Attribute and target based on Perrin et al. (2014). See the blanket bogs and associated habitats supporting document for the list of potential dominant species
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of negative indicator species less than 1%	Attribute and target based on Perrin et al. (2014), where the list of negative indicator species for this habitat is also presented
Vegetation composition: non-native species	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014). Rhododendron (<i>Rhododendron ponticum</i>) was recorded from blanket bog within the SAC (NPWS internal files)

Vegetation composition: native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of scattered native trees and shrubs less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: <i>Sphagnum</i> condition	Condition at a representative number of 2m x 2m monitoring stops	Less than 10% of the <i>Sphagnum</i> cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014)
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Last complete growing season's shoots of ericoids, crowberry (<i>Empetrum nigrum</i>) and bog-myrtle (<i>Myrica gale</i>) showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning in sensitive areas, into the moss, liverwort or lichen layer or exposure of peat surface due to burning	Attribute and target based on Perrin et al. (2014), where the list of sensitive areas for this habitat is also presented
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: drainage	Percentage area in local vicinity of a representative number of monitoring stops	Area showing signs of drainage from heavy trampling, tracking or ditches less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: erosion	Percentage area in local vicinity of a representative number of monitoring stops	Less than 5% of the greater bog mosaic comprises erosion gullies and eroded areas	Attribute and target based on Perrin et al. (2014)
Indicators of local distinctiveness	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order, 2015 (FPO) and/or the red data lists (Lockhart et al., 2012; Wyse Jackson et al., 2016). There are rare and threatened species in flushes within blanket bog in the SAC (NPWS internal files), including the Annex II and Annex IV listed, FPO listed and Near Threatened marsh saxifrage (<i>Saxifraga hirculus</i>) (Wyse Jackson et al., 2016) and the Annex II listed, FPO listed and Near Threatened slender green feather-moss (<i>Hamatocaulis (Drepanocladus) vernicosus</i>) (Lockhart et al., 2012). Although these species cannot be assigned specifically to blanket bog habitat, i.e. they are flush/fen species, they do occur in association with it (Muldoon et al., 2015; Campbell et al., 2015). See also the conservation objectives for marsh saxifrage (1528) and slender green feather-moss (1393)

Conservation Objectives for : Carrowmore Lake Complex SAC [000476]

7150 Depressions on peat substrates of the Rhynchosporion

To restore the favourable conservation condition of Depressions on peat substrates of the Rhynchosporion in Carrowmore Lake Complex 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	Depressions on peat substrates of the Rhynchosporion has not been mapped in detail for Carrowmore Lake Complex SAC and thus the total area of the qualifying habitat is unknown. Further details on this and the following attributes can be found in the Carrowmore Lake Complex SAC conservation objectives supporting document for blanket bogs and associated habitats
Habitat distribution	Occurrence	No decline, subject to natural processes	This habitat is scattered throughout the blanket bog in the SAC. It is best developed in areas of deep, quaking peat and around pools (Douglas et al., 1989; NPWS internal files). Further information can be found in Douglas et al. (1989), NPWS internal files and the blanket bogs and associated habitats supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	See the blanket bogs and associated habitats supporting document for further details
Vegetation composition: positive indicator species	Number of species at a representative number of 2m x 2m monitoring stops	Number of positive indicator species at each monitoring stop is at least five	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is also presented
Vegetation composition: <i>Rhynchospora</i> spp.	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of white beaked sedge (<i>Rhynchospora alba</i>) and brown beaked sedge (<i>R. fusca</i>) at least 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: potential dominant species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of each of the potential dominant species individually less than 35%	Attribute and target based on Perrin et al. (2014). See the blanket bogs and associated habitats supporting document for the list of potential dominant species
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of negative indicator species less than 1%	Attribute and target based on Perrin et al. (2014), where the list of negative indicator species for this habitat is also presented
Vegetation composition: non-native species	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of scattered native trees and shrubs less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: <i>Sphagnum</i> condition	Condition at a representative number of 2m x 2m monitoring stops	Less than 10% of the <i>Sphagnum</i> cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014)
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Last complete growing season's shoots of ericoids, crowberry (<i>Empetrum nigrum</i>) and bog-myrtle (<i>Myrica gale</i>) showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014)

Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning in sensitive areas, into the moss, liverwort or lichen layer or exposure of peat surface due to burning	Attribute and target based on Perrin et al. (2014), where the list of sensitive areas for this habitat is also presented
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: drainage	Percentage area in local vicinity of a representative number of monitoring stops	Area showing signs of drainage from heavy trampling, tracking or ditches less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: erosion	Percentage area in local vicinity of a representative number of monitoring stops	Less than 5% of the greater bog mosaic comprises erosion gullies and eroded areas	Attribute and target based on Perrin et al. (2014)
Indicators of local distinctiveness	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order, 2015 and/or the red data lists (Lockhart et al., 2012; Wyse Jackson et al., 2016)

Conservation Objectives for : Carrowmore Lake Complex SAC [000476]

1393 Slender Green Feather-moss *Drepanocladus vernicosus*

To maintain the favourable conservation condition of Slender Green Feather-moss (Shining Sickie-moss) in Carrowmore Lake Complex SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Distribution of populations	Number and geographical spread of populations	No decline, subject to natural processes. See map 3 for known locations at Largan More	(Please note that <i>Drepanocladus vernicosus</i> was reclassified as <i>Hamatocaulis vernicosus</i> by Hedenäs (1989)). The known population of slender green feather-moss (<i>Hamatocaulis vernicosus</i>) in Carrowmore Lake Complex SAC occurs in flushes, spring heads and beside water tracks within the blanket bog at Largan More. Data from NPWS surveys (NPWS internal files), Campbell (2013) and Campbell et al. (2015)
Population size	Number of individuals	No decline, subject to natural processes	The population at Largan More was estimated by Campbell (2013) to be 3,979,350 shoots (c.3,979,000 shoots). Counts of shoots were based on the mean of number of shoots in four 10cm x 10cm areas, extrapolated to 8,325 per m ² in 478m ² (Campbell, 2013). See Campbell et al. (2015) for further details
Population cover	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage cover of slender green feather-moss (<i>Hamatocaulis vernicosus</i>) should be at least 24%	The mean percentage cover of slender green feather-moss (<i>Hamatocaulis vernicosus</i>) recorded in four 2m x 2m plots at Largan More was 29.5% (Campbell, 2013). The target cover figure is a c.20% reduction of the recorded cover to allow for a margin of error and variability over monitoring seasons. See Campbell et al. (2015) for further details
Area of suitable habitat	Hectares	No decline, subject to natural processes	The extent of occupancy for the species at Largan More is estimated to be c.1,593m ² ; however, only c.30% of this area is suitable habitat, i.e. c.478m ² (0.048ha). See Campbell (2013) and Campbell et al. (2015) for further details
Hydrological conditions: water table level	Metres	Maintain suitable hydrological conditions	Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) is mostly confined to mesotrophic fens, a transitional habitat between acid bog and base-rich fen. This appears to occur in at least two forms in Ireland: transitional flushes, where the plants can occur in lawns that rise and fall with fluctuating water table levels, such as at Largan More; and wet lowland sedge meadows, where plants can be inundated in winter, but may be subject to some desiccation in the summer. Based on Campbell (2013) and Campbell et al. (2015)
Vegetation composition: tree cover	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage tree cover should be less than 15%	Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) grows in moss-dominated, open communities, generally with a low cover of trees and shrubs. Campbell (2013) recorded 0% tree cover at Largan More. See also Campbell et al. (2015)
Vegetation composition: shrub cover	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage shrub cover should be less than 20%	Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) grows in moss-dominated, open communities, generally with a low cover of trees and shrubs. Campbell (2013) recorded 0% shrub cover at Largan More. See also Campbell et al. (2015)
Vegetation composition: grass cover	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage grass species cover should be less than 25%	Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) grows in moss-dominated, open communities, generally with a low cover of grasses, maintained by a low grazing intensity by sheep and cattle at Largan More. Campbell (2013) recorded grass cover of 1-10% in four 2m x 2m plots at Largan More. See also Campbell et al. (2015)
Vegetation composition: bryophyte cover	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage bryophyte cover should be more than 50%	Campbell (2013) recorded bryophyte cover of 34-90% in four 2m x 2m plots at Largan More. See also Campbell et al. (2015)

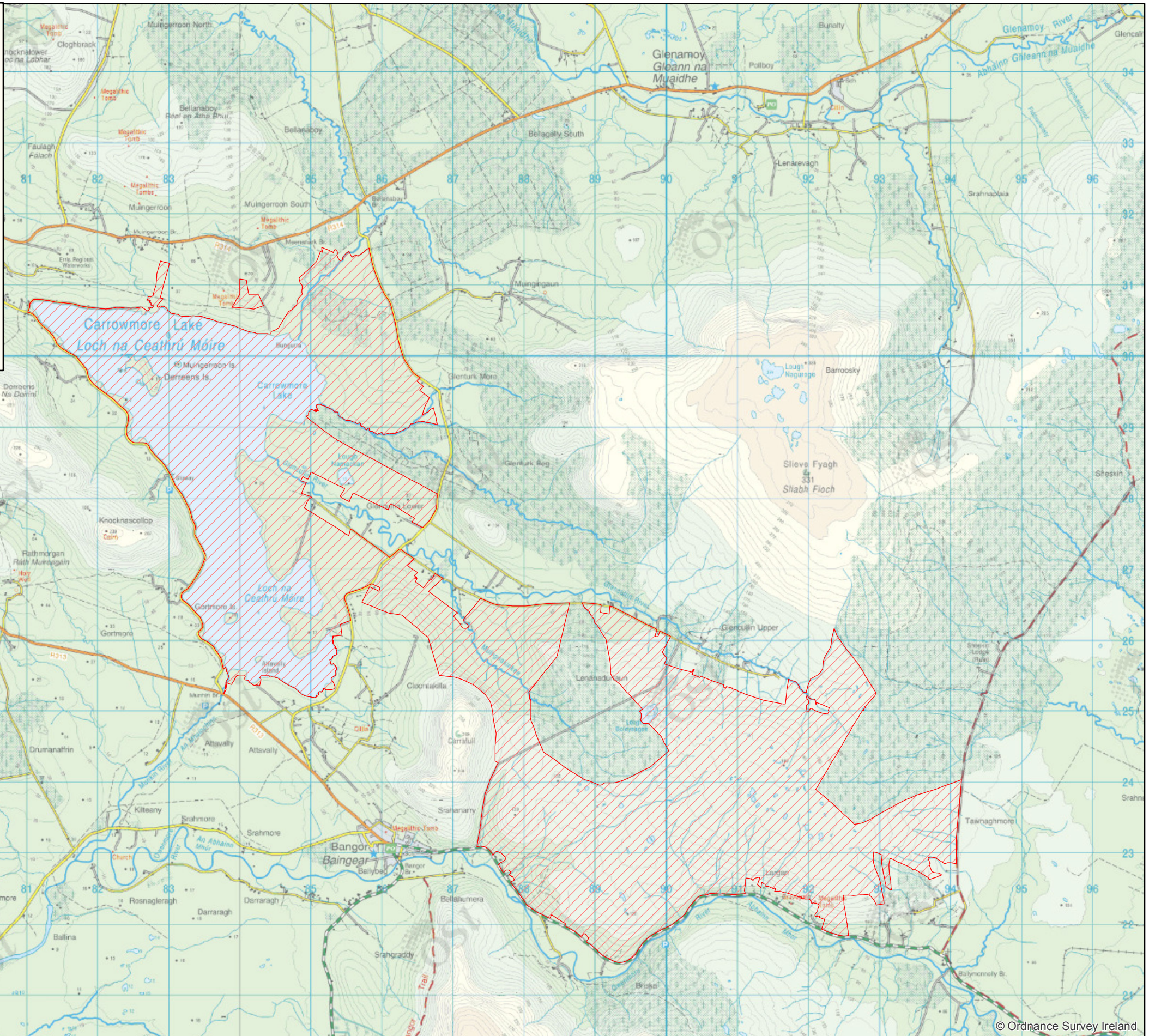
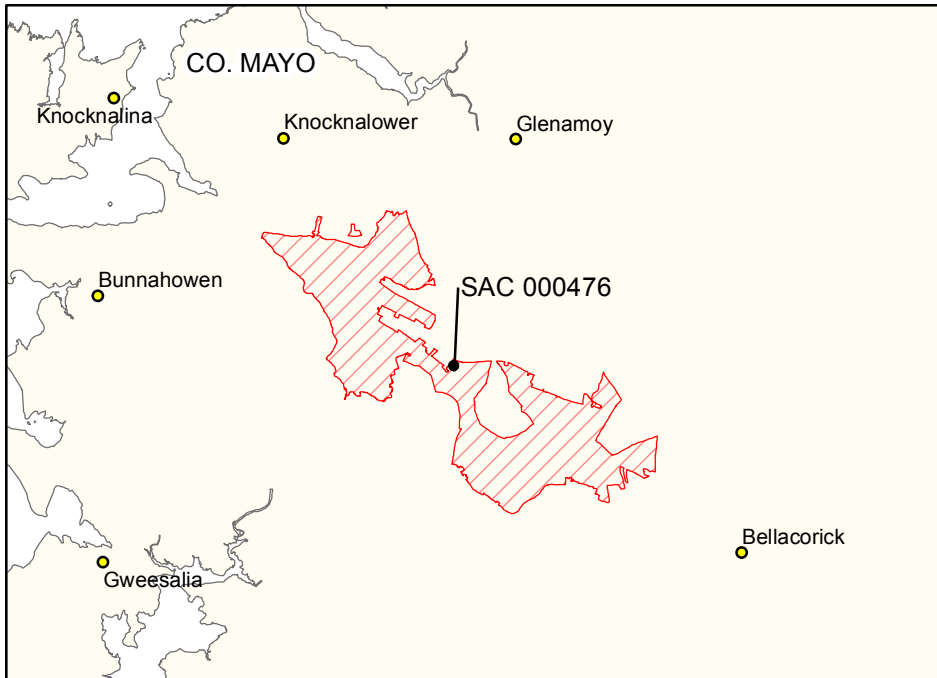
Vegetation composition: cover of <i>Calliergonella cuspidata</i>	Percentage cover in a representative number of 2m x 2m monitoring plots	Mean percentage cover of <i>Calliergonella cuspidata</i> should be less than 15%	<i>Calliergonella cuspidata</i> , a moss species often associated with high nutrient conditions, is usually present, but with low cover and never dominant. Cover of <i>Calliergonella cuspidata</i> was 0-2% in four 2m x 2m plots recorded by Campbell (2013) at Largan More. See also Campbell et al. (2015)
Vegetation structure: vegetation height	Centimetres in a representative number 2m x 2m monitoring plots	Mean vegetation height should not exceed 40cm	Campbell (2013) recorded a mean vegetation height of 13.7cm in four 2m x 2m plots at Largan More. See also Campbell et al. (2015)

Conservation Objectives for : Carrowmore Lake Complex SAC [000476]

1528 Marsh Saxifrage *Saxifraga hirculus*

To maintain the favourable conservation condition of Marsh Saxifrage in Carrowmore Lake Complex SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Distribution of populations	Number and geographical spread of populations	No loss in geographical spread and number of populations, subject to natural processes. See map 4 for 1km grid square locations	Marsh saxifrage (<i>Saxifraga hirculus</i>) is known to occur in three flushes in Carrowmore Lake Complex SAC, at Largan Mor A, Largan Mor B and Largan Mor C. See Muldoon (2011) and Muldoon et al. (2015)
Population size: number of rosettes	Number	Maintain the size of each known population, subject to natural processes. The target numbers of rosettes are: at least 2,800 at Largan Mor A, at least 440 at Largan Mor B and at least 80 at Largan Mor C	The numbers of rosettes recorded were: 3,500 at Largan Mor A, 550 at Largan Mor B (Muldoon, 2011) and 100 at Largan Mor C (NPWS internal files). The target figures are a 20% reduction of the recorded numbers to allow for a margin of error and variability over monitoring seasons. See Muldoon et al. (2015) for further details
Population size: area of occupancy	Hectares	Maintain the area of occupancy of each known population, subject to natural processes. The target areas are: at least 0.0084ha at Largan Mor A, at least 0.00045ha at Largan Mor B and at least 0.00027ha at Largan Mor C	The areas of occupancy for the species estimated by Muldoon (2011) were: 93m ² (0.0093ha) at Largan Mor A and 5m ² (0.0005ha) at Largan Mor B. The area of occupancy at Largan Mor C has been estimated to be 3m ² (0.0003ha) (NPWS internal files). The target area figures are a 10% reduction of the recorded areas to allow for a margin of error. See Muldoon et al. (2015) for further details
Hydrological conditions: water level	Occurrence of high or fluctuating water levels	Maintain the appropriate natural hydrological regime necessary to support the habitat for the species	In Ireland, marsh saxifrage (<i>Saxifraga hirculus</i>) is now restricted to mineral flushes in blanket bog where rising groundwater forms small streams and seepage areas suitable for the species. Based on Muldoon (2011) and Muldoon et al. (2015)
Vegetation composition: positive indicator species	Occurrence in a number of 1m x 1m monitoring stops	Knotted pearlwort (<i>Sagina nodosa</i>) should be present in at least two of five 1m x 1m monitoring stops	See Muldoon (2011) and Muldoon et al. (2015) for further details
Vegetation composition: negative indicator species	Mean percentage cover in five 1m x 1m monitoring stops	Mean percentage cover of purple moor-grass (<i>Molinia caerulea</i>) should not exceed 5%; mean percentage cover of Yorkshire fog (<i>Holcus lanatus</i>) should not exceed 15%	Low cover of the negative indicator species purple moor-grass (<i>Molinia caerulea</i>) and Yorkshire fog (<i>Holcus lanatus</i>) should be maintained. See Muldoon (2011) and Muldoon et al. (2015) for further details
Vegetation structure: sward height	Centimetres	Maintain a mean vegetation height of less than 15cm	See Muldoon (2011) and Muldoon et al. (2015) for further details
Vegetation structure: grazing level	Evidence of grazing	Maintain grazing at light to moderate levels to ensure an open vegetation structure and to allow flowering to occur	Low grazing was identified as an issue at Largan Mor A and Largan Mor B; however, vegetation height was within the target range at both sites. See Muldoon (2011) and Muldoon et al. (2015) for further details



Legend

Carrowmore Lake Complex SAC 000476

An Roinn Ealaíon, Oidhreachta, Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta
 Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

MAP 1:
CARROWMORE LAKE COMPLEX SAC
CONSERVATION OBJECTIVES
SAC DESIGNATION

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

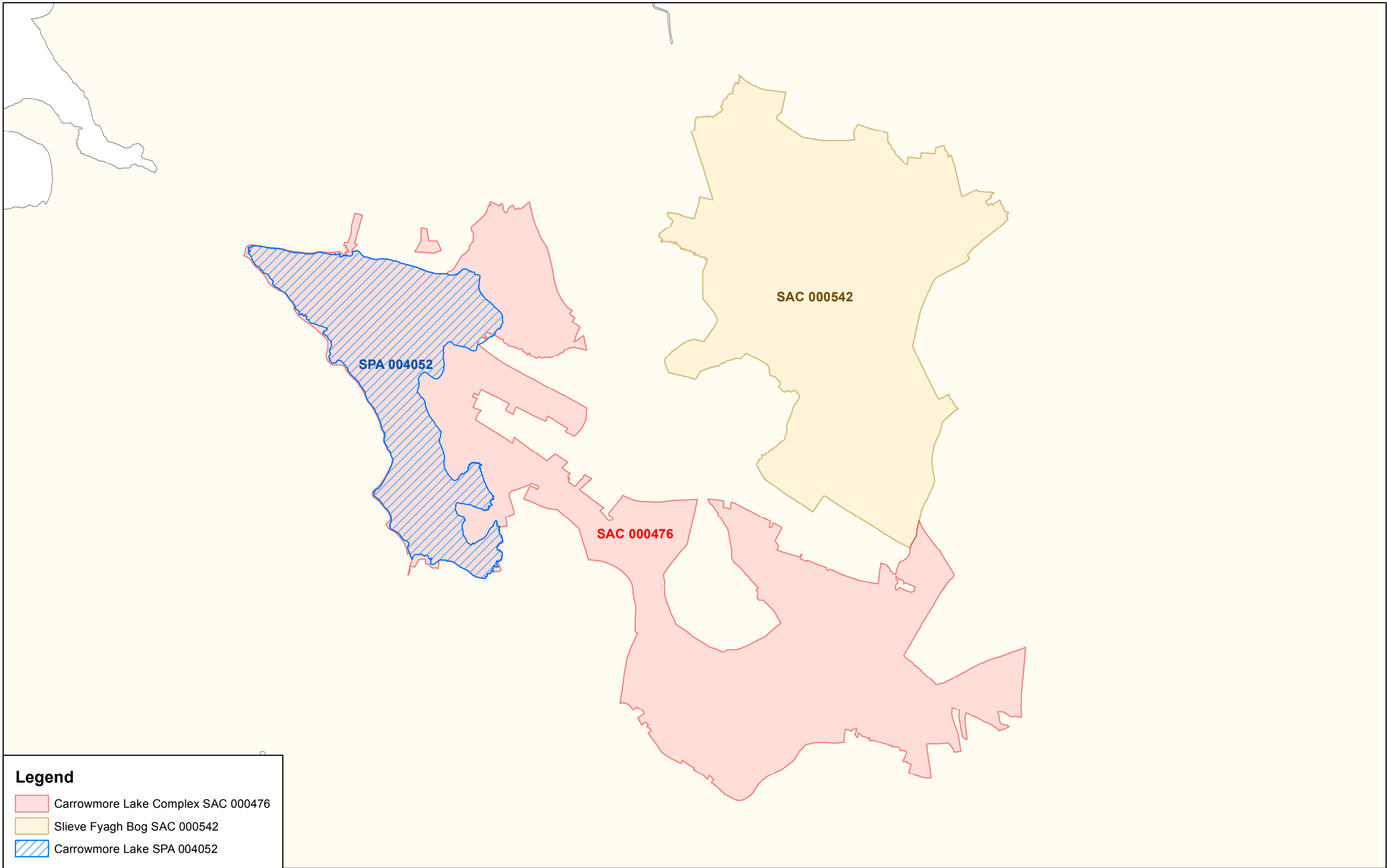
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SAC 000476; version 3
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The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Ordnance Survey of Ireland Licence No EN 0059216. © Ordnance Survey of Ireland Government of Ireland.

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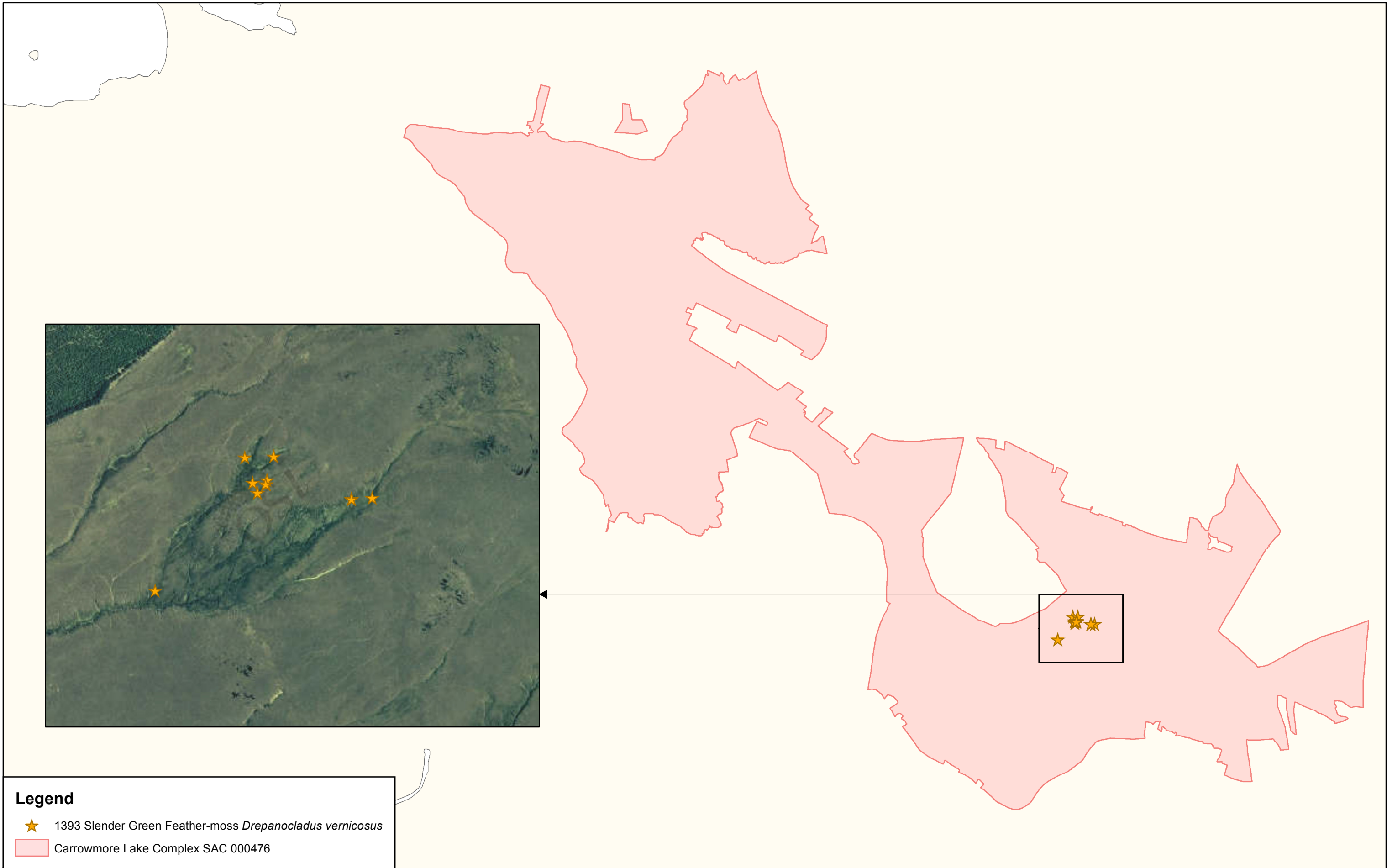
Map Version 1
Date: April 2017

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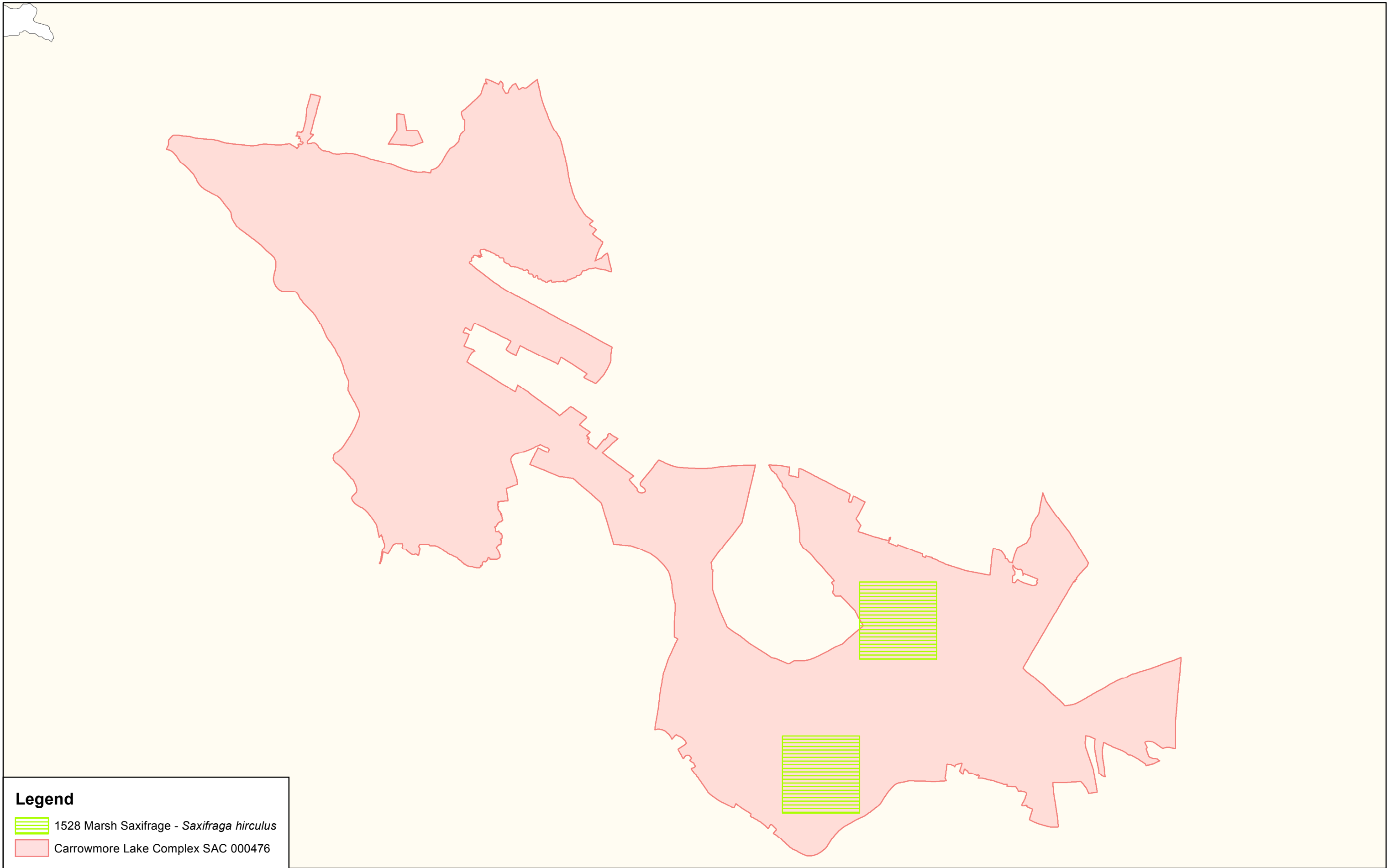
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- Carrowmore Lake Complex SAC 000476
- Slieve Fyagh Bog SAC 000542
- Carrowmore Lake SPA 004052



Legend

- ★ 1393 Slender Green Feather-moss *Drepanocladus vernicosus*
- Carrowmore Lake Complex SAC 000476



Legend

- 1528 Marsh Saxifrage - *Saxifraga hirculus*
- Carrowmore Lake Complex SAC 000476