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Conservation Objectives Series

Slieve Mish Mountains SAC 002185

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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***

002185	Slieve Mish Mountains SAC
6985	Killarney Fern *Vandenboschia speciosa*
4010	Northern Atlantic wet heaths with *Erica tetralix*
4030	European dry heaths
4060	Alpine and Boreal heaths
7130	Blanket bogs (* if active bog)
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)
8210	Calcareous rocky slopes with chasmophytic vegetation
8220	Siliceous rocky slopes with chasmophytic vegetation

Please note that this SAC is adjacent to Tralee Bay and Magharees Peninsula, West to Cloghane SAC (002070). See map 2. The conservation objectives for this site should be used in conjunction with those for the adjacent site as appropriate.

Supporting documents, relevant reports & publications

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

NPWS Documents

Year :	2009
Title :	Ireland Red List No. 2: Non-marine molluscs
Author :	Byrne, A.; Moorkens, E.A.; Anderson, R.; Killeen, I.J.; Regan, E.C.
Series :	Ireland Red List series, NPWS
Year :	2010
Title :	Ireland Red List No. 4: Butterflies
Author :	Regan, E.C.; Nelson, B.; Aldwell, B.; Bertrand, C.; Bond, K.; Harding, J.; Nash, D.; Nixon, D.; Wilson, C.J.
Series :	Ireland Red List series, NPWS
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 Manuals, No. 79
Year :	2014
Title :	National Survey of Upland Habitats (Phase 4, 2013-2014), Draft Site Report No. 15: Slieve Mish Mountains cSAC (002185), Co. Kerry
Author :	Perrin, P.M.; Roche, J.R.; Barron, S.J.; Daly, O.H.; Hodd, R.L.; Devaney, F.M.
Series :	Unpublished report to NPWS
Year :	2015
Title :	Monitoring methods for the Killarney Fern (*Trichomanes speciosum* Willd.) in Ireland
Author :	Ní Dhúill, E.; Smyth, N.; Waldren, S.; Lynn, D.
Series :	Irish Wildlife Manuals, No. 82
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 :	2019
Title :	The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments
Author :	NPWS
Series :	Conservation assessments
Year :	2021
Title :	Slieve Mish Mountains SAC (site code: 2185) Conservation objectives supporting document - upland habitats V1
Author :	NPWS
Series :	Conservation objectives supporting document
Year :	in prep.
Title :	Monitoring and assessment of Killarney Fern (*Vandenboschia speciosa* (Willd.) Kunkel) in Ireland, 2015-2018
Author :	Ní Dhúill, E.; O'Neill, F.H.; Hodd, R.
Series :	Irish Wildlife Manuals

Other References

Year :	2012
Title :	Rare and threatened bryophytes of Ireland
Author :	Lockhart, N.; Hodgetts, N.; Holyoak, D.
Series :	National Museums Northern Ireland
Year :	2017
Title :	Irish Vegetation Classification: Technical Progress Report No. 3
Author :	Perrin, P.
Series :	Report submitted to National Biodiversity Data Centre

Spatial data sources

Year :	2014
Title :	National Survey of Upland Habitats
GIS Operations :	Habitat dataset for site clipped to SAC boundary. Relevant QI selected and exported to new dataset. Expert opinion used as necessary to resolve any issues arising
Used For :	4010, 4030, 4060, 7130, 8110, 8210, 8220 (maps 3, 4, 5, 6, 7, 8, 9)

4010 Northern Atlantic wet heaths with Erica tetralix

To restore the favourable conservation condition of Northern Atlantic wet heaths with *Erica tetralix* in Slieve Mish Mountains SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area increasing, subject to natural processes	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Northern Atlantic wet heaths with *Erica tetralix* was mapped in detail for the SAC and the total area of the qualifying habitat stated by Perrin et al. (2014) is 4,640.7ha; it is the most extensive Annex I habitat of Slieve Mish Mountains SAC, covering 47.4% of the SAC. Perrin et al. (2014) report obvious losses of habitat since 1995 of approximately 3.3ha. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology and a brief discussion of restoration potential are also presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 3	Wet heath was recorded by Perrin et al. (2014) throughout Slieve Mish Mountains SAC. Extensive patches were recorded at Knockawaddra in the east, and also along the lower slopes of the northern and southern sides of the range. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Perrin et al. (2014) recorded seven different wet heath communities within this SAC. Data on the abundance of these communities is reproduced in the uplands supporting document. Further information on the vegetation communities associated with this habitat is presented in Perrin et al. (2014). See also the Irish Vegetation Classification (Perrin, 2017; www.biodiversityireland.ie/projects/ivc-classification-explorer/)
Vegetation composition: cross-leaved heath	Occurrence within 20m of a representative number of 2m x 2m monitoring stops	Cross-leaved heath (*Erica tetralix*) present within a 20m radius of each monitoring stop	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: positive indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of positive indicator species at least 50%	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is presented. Further details can be found in the uplands supporting document
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of *Cladonia* and *Sphagnum* species, *Racomitrium lanuginosum* and pleurocarpous mosses at least 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: ericoid species and crowberry	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of ericoid species and crowberry (*Empetrum nigrum*) at least 15%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: dwarf shrub species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of dwarf shrubs less than 75%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details

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). See the uplands supporting document for further details
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). See the uplands supporting document for further details. The non-native moss (*Campylopus introflexus*) was recorded within this habitat in the SAC by Perrin et al. (2014). Rhododendron (*Rhododendron ponticum*) was also recorded within this habitat at Derrymore East by 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 20%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: bracken	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of bracken (*Pteridium aquilinum*) less than 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: soft rush	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of soft rush (*Juncus effusus*) less than 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: *Sphagnum* condition	Condition at a representative number of 2m x 2m monitoring stops	Less than 10% of the *Sphagnum* cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Less than 33% collectively of the last complete growing season's shoots of ericoids, crowberry (*Empetrum nigrum*) and bog-myrtle (*Myrica gale*) showing signs of browsing	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 presented. See the uplands supporting document for further details
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). See the uplands supporting document for further details
Physical structure: drainage	Percentage cover 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). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat by Perrin et al. (2014) during the NSUH, as was the liverwort *Kurzia sylvatica*, listed as Near Threatened in Ireland (Lockhart et al., 2012). New records should also be considered within this attribute. See the uplands supporting document for further details

4030 European dry heaths

To restore the favourable conservation condition of European dry heaths in Slieve Mish Mountains 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	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). European dry heaths was mapped in detail for the SAC and the total area of the qualifying habitat stated by Perrin et al. (2014) is 1,117.7ha, covering 11.4% of the SAC. Perrin et al. (2014) report no net loss of area of the habitat since 1995. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology is presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 4	Dry heath was recorded by Perrin et al. (2014) throughout Slieve Mish Mountains SAC, but was most extensive on Emlagh in the western end of the SAC. Other patches occur at Ballyarkane Oughter and Gortaleen Mountain on the upper southern slopes and also at Scragg in the north. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Perrin et al. (2014) recorded five different dry heath communities within this SAC. Data on the abundance of these communities is reproduced in the uplands supporting document. Further information on the vegetation communities associated with this habitat is presented in Perrin et al. (2014). See also the Irish Vegetation Classification (Perrin, 2017; www.biodiversityireland.ie/projects/ivc-classification-explorer/)
Vegetation composition: lichens and bryophytes	Number of species at a representative number of 2m x 2m monitoring stops	Number of bryophyte or non-crustose lichen species present at each monitoring stop at least three, excluding *Campylopus* and *Polytrichum* mosses	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: number of 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 at least two	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat, which is composed of dwarf shrubs, is presented. See the uplands supporting document for further details
Vegetation composition: cover of positive indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of positive indicator species at least 50% for siliceous dry heath and 50-75% for calcareous dry heath	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat, which is composed of dwarf shrubs, is presented. See the uplands supporting document for further details
Vegetation composition: dwarf shrub composition	Percentage cover at a representative number of 2m x 2m monitoring stops	Proportion of dwarf shrub cover composed collectively of bog-myrtle (*Myrica gale*), creeping willow (*Salix repens*) and western gorse (*Ulex gallii*) is less than 50%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 is presented. See the uplands supporting document for further details

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). See the uplands supporting document for further details. The non-native moss *Campylopus introflexus* was recorded within this habitat in the SAC forming extensive carpets by 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 20%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: bracken	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of bracken (*Pteridium aquilinum*) less than 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: soft rush	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of soft rush (*Juncus effusus*) less than 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: senescent ling	Percentage cover at a representative number of 2m x 2m monitoring stops	Senescent proportion of ling (*Calluna vulgaris*) cover less than 50%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Less than 33% collectively of the last complete growing season's shoots of ericoids showing signs of browsing	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning in sensitive areas	Attribute and target based on Perrin et al. (2014), where the list of sensitive areas is presented. See the uplands supporting document for further details
Vegetation structure: growth phases of ling	Percentage cover in local vicinity of a representative number of monitoring stops	Outside sensitive areas, all growth phases of ling (*Calluna vulgaris*) should occur throughout, with at least 10% of cover in the mature phase	Attribute and target based on Perrin et al. (2014), where the list of sensitive areas is also presented. See the uplands supporting document for further details
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). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. The Near Threatened mosses *Hylocomiastrum umbratum* and *Sphagnum russowii* (Lockhart et al., 2012) were recorded in this habitat in the SAC during the NSUH (Perrin et al., 2014). Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat by Perrin et al. (2014). Any new records should also be considered within this attribute. See the uplands supporting document for further details

4060 Alpine and Boreal heaths

To restore the favourable conservation condition of Alpine and Boreal heaths in Slieve Mish Mountains SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area increasing, subject to natural processes	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Alpine and Boreal heaths was mapped in detail for the SAC and the area of the qualifying habitat stated by Perrin et al. (2014) is 417.1ha, covering 4.3% of the SAC. Perrin et al. (2014) report minor losses of area of the habitat since 1995 of approximately 0.04ha. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology is presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5	Alpine and Boreal heath was recorded by Perrin et al. (2014) on the high ground across the SAC, but was most abundant on the upper slopes of Baurlegaum, Caherconree and Gearbane in the central upland area and also at Knockmore and Moanlaur in the west. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Perrin et al. (2014) recorded three different Alpine and Boreal heath communities within this SAC. Data on the abundance of these communities is reproduced in the uplands supporting document. Further information on the vegetation communities associated with this habitat is presented in Perrin et al. (2014). See also the Irish Vegetation Classification (Perrin, 2017; www.biodiversityireland.ie/projects/ivc-classification-explorer/)
Vegetation composition: lichens and bryophytes	Number of species at a representative number of 2m x 2m monitoring stops	Number of bryophyte or non-crustose lichen species present at each monitoring stop at least three	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: positive indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of positive indicator species at least 66%	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is presented. See the uplands supporting document for further details
Vegetation composition: dwarf shrub species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of dwarf shrub species at least 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 10%	Attribute and target based on Perrin et al. (2014), where the list of negative indicator species is presented. See the uplands supporting document for further details
Vegetation composition: non-native species	Percentage cover at 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). See the uplands supporting document for further details. No non-native species were recorded within this habitat by Perrin et al. (2014)
Vegetation structure: signs of grazing	Percentage of leaves grazed at a representative number of 2m x 2m monitoring stops	Less than 10% collectively of the live leaves of specific graminoids showing signs of grazing	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details, including the list of specific graminoids

Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Less than 33% collectively of the last complete growing season's shoots of ericoids and crowberry (*Empetrum nigrum*) showing signs of browsing	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning within the habitat	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. The Near Threatened moss *Hylocomiastrum umbratum* (Lockhart et al., 2012) was recorded in this habitat in the SAC during the NSUH (Perrin et al., 2014). Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat in the SAC by Perrin et al. (2014). Any new records should also be considered within this attribute. See the uplands supporting document for further details

7130 Blanket bogs (* if active bog)

To restore the favourable conservation condition of Blanket bogs (* if active bog) in Slieve Mish Mountains SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area increasing, subject to natural processes	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Perrin et al. (2014) state that the total area of blanket bog in the SAC is 1,919.2ha (19.6% of the SAC). This comprises 1,908.8ha of active blanket bog area and 10.4ha of inactive blanket bog. Perrin et al. (2014) did not report a net loss of the habitat since 1995; however, it is important to note that chronic losses due to erosion since 1995 cannot be quantified (12.9ha were mapped as eroding blanket bog by Perrin et al., 2014). It should be noted also that further restoration of blanket bog would be required in order to fulfil the targets for peat formation and hydrology presented below. See the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 6	Blanket bog was recorded by Perrin et al. (2014) across Slieve Mish Mountains SAC, with extensive upland blanket bog around Knockauncorragh and Glanbrack Mountain in the centre, the Moanlaun ridge in the west and Commons in the north-west. Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology and a brief discussion of restoration potential are also presented
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands 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	From the areas given by Perrin et al. (2014) above, 99.5% of the Annex I blanket bog habitat is currently active. See the uplands 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 uplands supporting document
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Perrin et al. (2014) recorded seven different active blanket bog communities within this SAC. Data on the abundance of these communities is reproduced in the uplands supporting document. Further information on the vegetation communities associated with this habitat is presented in Perrin et al. (2014). See also the Irish Vegetation Classification (Perrin, 2017; www.biodiversityireland.ie/projects/ivc-classification-explorer/)
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 at least seven	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is presented. See the uplands supporting document for further details
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of bryophytes or lichens, excluding *Sphagnum fallax*, at least 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 uplands supporting document for further details, including the list of potentially 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 is presented. See the uplands supporting document for further details
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). See the uplands supporting document for further details. The non-native moss *Campylopus introflexus*, forming extensive carpets, was recorded within this habitat in the SAC by 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). See the uplands supporting document for further details
Vegetation structure: *Sphagnum* condition	Condition at a representative number of 2m x 2m monitoring stops	Less than 10% of the *Sphagnum* cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 (*Empetrum nigrum*) and bog-myrtle (*Myrica gale*) showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 is presented. See the uplands supporting document for further details
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). See the uplands supporting document for further details
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). See the uplands supporting document for further details
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). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 (FPO) and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. The FPO listed and Near Threatened liverwort *Mastigophora woodsii* and the FPO listed and Vulnerable liverwort *Scapania ornithopodioides* (Lockhart et al., 2012) were recorded during the NSUH (Perrin et al., 2014) in the habitat in the SAC. Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat by Perrin et al. (2014). Any new records should also be considered within this attribute. See the uplands supporting document for further details

8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)

To maintain the favourable conservation condition of Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) in Slieve Mish Mountains 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	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) was mapped in detail for the SAC and the area of the qualifying habitat stated by Perrin et al. (2014) is 80.0ha, covering 0.8% of the SAC. Perrin et al. (2014) report no significant losses of area since 1995. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology is presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 7	Siliceous scree was recorded by Perrin et al. (2014) on steep ground throughout Slieve Mish Mountains SAC. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of bryophytes and non-crustose lichen species at least 5%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Proportion of vegetation composed 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 presented. See the uplands supporting document for further details
Vegetation composition: non-native species	Percentage cover at a representative number of 2m x 2m monitoring stops	Proportion of vegetation composed of non-native species less than 1%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details. The non-native moss *Campylopus introflexus* was recorded within this habitat in the SAC by Perrin et al. (2014)
Vegetation composition: positive indicator species	Number of species in local vicinity of a representative number of monitoring stops	At least one positive indicator species present in vicinity of each monitoring stop in block scree	Attribute and target based on Perrin et al. (2014). The list of positive indicator species for this habitat is also presented in Perrin et al. (2014) and is the same as for 8220 Siliceous rocky slopes. Further details can be found in the uplands supporting document
Vegetation composition: grass species and dwarf shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of grass species and dwarf shrubs less than 20%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation composition: bracken, native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of bracken (*Pteridium aquilinum*), native trees and shrubs less than 25%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: grazing and browsing	Percentage of leaves/ shoots grazed/browsed at a representative number of 2m x 2m monitoring stops	Live leaves of forbs and shoots of dwarf shrubs showing signs of grazing or browsing collectively less than 50%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Physical structure: disturbance	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Ground disturbed by human and animal paths, scree running or vehicles less than 10%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details

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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 (FPO) and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat during the NSUH (Perrin et al., 2014). The FPO listed and Vulnerable liverwort *Bazzania pearsonii* and the Near Threatened liverwort *Douinia ovata* (Lockhart et al., 2012) were recorded from within the habitat in the SAC during the NSUH (Perrin et al., 2014). These and any new records should be considered within this attribute. See the uplands supporting document for further details

8210 Calcareous rocky slopes with chasmophytic vegetation

To restore the favourable conservation condition of Calcareous rocky slopes with chasmophytic vegetation in Slieve Mish Mountains 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	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Calcareous rocky slopes with chasmophytic vegetation was mapped in detail for the SAC and the area of the qualifying habitat stated by Perrin et al. (2014) is 2.4ha, covering only 0.02% of the SAC. Perrin et al. (2014) report no significant losses of area since 1995. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology is presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 8	Calcareous rocky slopes was recorded by Perrin et al. (2014) in limited locations in the central portion of Slieve Mish Mountains SAC. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Vegetation composition: positive indicator fern and *Saxifraga* species	Number of species in local vicinity of a representative number of monitoring stops	Number of ferns and *Saxifraga* indicators in vicinity of each monitoring stop at least one	Attribute and target based on Perrin et al. (2014), where the list of positive indicator species for this habitat is also presented. See the uplands supporting document for further details
Vegetation composition: positive indicator species	Number of species in local vicinity of a representative number of monitoring stops	Number of positive indicator species in vicinity of each monitoring stop at least three	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is presented. Further details can be found in the uplands supporting document
Vegetation composition: non-native species	Percentage cover in local vicinity of a representative number of monitoring stops	Proportion of vegetation composed of non-native species less than 1%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details. The non-native New Zealand willowherb (*Epilobium brunnescens*) was recorded within this habitat by Perrin et al. (2014)
Vegetation composition: bracken, native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of bracken (*Pteridium aquilinum*), native trees and shrubs less than 25%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: grazing and browsing	Percentage of leaves/ shoots grazed/browsed in local vicinity of a representative number of monitoring stops	Live leaves of forbs and shoots of dwarf shrubs showing signs of grazing or browsing collectively less than 50%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 (FPO) and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. The FPO listed and Critically Endangered moss *Encalypta ciliata* and the Near Threatened mosses *Grimmia torquata* and *Schistidium strictum* (Lockhart et al., 2012) were recorded in the habitat in the SAC during the NSUH (Perrin et al., 2014). These and any new records should be considered within this attribute. See the uplands supporting document for further details

8220 Siliceous rocky slopes with chasmophytic vegetation

To maintain the favourable conservation condition of Siliceous rocky slopes with chasmophytic vegetation in Slieve Mish Mountains 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	Slieve Mish Mountains SAC was surveyed as part of the National Survey of Upland Habitats (NSUH; Perrin et al., 2014). Siliceous rocky slopes with chasmophytic vegetation was mapped in detail for the SAC and the area of the qualifying habitat stated by Perrin et al. (2014) is 32.0ha, covering 0.3% of the SAC. Perrin et al. (2014) report no significant losses of area since 1995. Further information can be found in Perrin et al. (2014). Further details on this and the following attributes can be found in the Slieve Mish Mountains SAC conservation objectives supporting document for upland habitats where a summary of the mapping methodology is presented
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 9	Siliceous rocky slopes was recorded by Perrin et al. (2014) scattered throughout Slieve Mish Mountains SAC. Patches were associated with the steep sides of the northern valleys and on the slopes of Gearhane and Lack Mountain. A summary of the mapping methodology is presented in the uplands supporting document
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil pH and nutrient status within natural ranges	See the uplands supporting document for further details
Vegetation composition: positive indicator species	Number of species in local vicinity of a representative number of monitoring stops	At least one positive indicator species present in vicinity of each monitoring stop	Attribute and target based on Perrin et al. (2014). The list of positive indicator species for this habitat is also presented in Perrin et al. (2014) and is the same as for 8110 Siliceous screes. Further details can be found in the uplands supporting document
Vegetation composition: non-native species	Percentage cover in local vicinity of a representative number of monitoring stops	Proportion of vegetation composed of non-native species less than 1%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details. During the NSUH, the non-native New Zealand willowherb (*Epilobium brunnescens*) was recorded within this habitat in the SAC by Perrin et al. (2014)
Vegetation composition: bracken, native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of bracken (*Pteridium aquilinum*), native trees and shrubs less than 25%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
Vegetation structure: grazing and browsing	Percentage of leaves/ shoots grazed/browsed in local vicinity of a representative number of monitoring stops	Live leaves of forbs and shoots of dwarf shrubs showing signs of grazing or browsing collectively less than 50%	Attribute and target based on Perrin et al. (2014). See the uplands supporting document for further details
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 and no decline in status of hepatic mats associated with this habitat	This includes species on the Flora (Protection) Order, 2015 (FPO) and/or Red Lists (Byrne et al., 2009; Regan et al., 2010; Lockhart et al., 2012; Wyse Jackson et al., 2016, etc.). Perrin et al. (2014) compiled and mapped existing rare and notable plant records for the SAC and added any new records collected during the NSUH. Hepatic mats of the *Calluna vulgaris-Herbertus aduncus* community were recorded within this habitat during the NSUH (Perrin et al., 2014). The FPO listed and Vulnerable liverwort *Bazzania pearsonii* and the Near Threatened liverwort *Douinia ovata* (Lockhart et al., 2012) were recorded from within the habitat in the SAC during the NSUH (Perrin et al., 2014). Any new records should also be considered within this attribute. See the uplands supporting document for further details

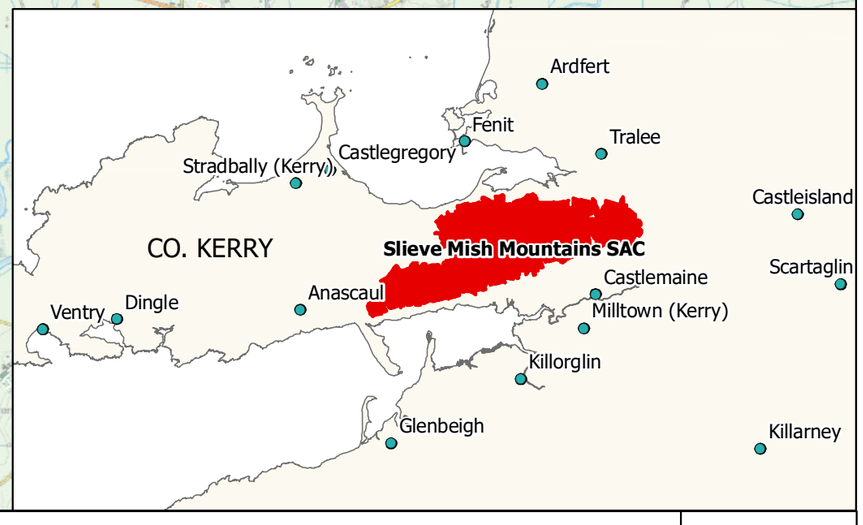
6985 Killarney Fern *Vandenboschia speciosa*

To maintain the favourable conservation condition of Killarney Fern (*Vandenboschia speciosa*) in Slieve Mish Mountains SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Distribution	Occurrence	No loss in geographical spread of populations, subject to natural processes	The population of Killarney fern (*Vandenboschia speciosa* [formerly *Trichomanes speciosum*; species code 1421]) is currently known from locations in Slieve Mish Mountains SAC. Exact locations are not mapped here on account of the threat posed by illegal collecting. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Number of populations	Number	No decline, subject to natural processes	One population of the species has been recorded in the SAC since 1960. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Number of colonies	Number	No decline, subject to natural processes	Two colonies of the species have been recorded in the population in the SAC since 1960. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population: life-cycle stage	Type (sporophyte or gametophyte)	Maintain life-cycle stage composition of populations, subject to natural processes	Both of the colonies recorded since 1960 are composed of sporophytes (frond stage) with coexisting gametophytes (filamentous stage) and one of these has juvenile sporophytes. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population size: area of occupancy	Square metres	No decline, subject to natural processes	Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population size: living sporophyte fronds	Number	No decline, subject to natural processes	Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population structure: young and unfurling fronds	Occurrence	Young (not fully expanded) and/or unfurling (crozier) fronds present in populations previously observed to have these, subject to natural processes	Young and/or unfurling fronds have been recorded from Slieve Mish Mountains SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population structure: fertile fronds	Occurrence	Fertile fronds present in populations previously observed to have these, subject to natural processes	Fertile fronds have been recorded from the SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Population structure: juvenile sporophyte fronds emerging from gametophytes	Number	No decline, subject to natural processes	Juvenile sporophyte fronds emerging from gametophytes have been recorded from the SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Habitat extent	Hectares	No loss of suitable habitat, subject to natural processes	The species grows in deeply shaded, humid situations - dripping caves, overhangs and crevices on cliffs, rocky slopes, by waterfalls, in stream ravines and gullies, on rock or soil banks in woodlands and, occasionally, under fallen trees and on the floor of damp woodlands. Whilst also occurring in these habitats, the gametophyte stage can grow in drier areas that do not suit the sporophyte. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files

Hydrological conditions: wet/damp microhabitats	Occurrence	Maintain hydrological conditions at the locations of known populations - visible water source, with dripping or seeping water present and/or substrate wet/damp to touch, subject to natural processes	Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Hydrological conditions: relative humidity	Percentage	Maintain relative humidity levels at known colonies at not less than 80%, subject to natural processes	Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Hydrological conditions: desiccated fronds	Number	No increase, subject to natural processes	Presence of desiccated sporophyte fronds and gametophyte mats is indicative of unsuitable conditions. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Light levels: shading	Shade index score	At least 4 for woodland sporophyte-only and mixed colonies; at least 5 for open upland sporophyte-only and mixed colonies; at least 6 for gametophyte-only colonies, subject to natural processes	Shade Index: 4. Moderate shade, e.g. light-medium deciduous canopy with sun flecks. 5. Permanently shaded from direct sunlight but otherwise open to sky. 6. Deep woodland (e.g. coniferous or in ravine) shade, no sun flecks. 7. Perpetual deep shade, e.g. cave entrance, beneath boulder. The species occurs in moderate shade in woodland in Slieve Mish Mountains SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Woodland canopy cover	Percentage	No loss of woodland canopy at, or in the vicinity of, the locations of known populations and canopy cover here maintained at more than 33%, subject to natural processes	Woodland management at or near to locations of known populations of the species must take account of its habitat requirements, particularly with regard to maintenance of sufficient canopy cover. The species occurs in woodland in Slieve Mish Mountains SAC. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files
Invasive species	Occurrence	Maintain absence of invasive non-native and vigorous native plant species at the locations of known populations or, if present, maintain vegetation cover of these at less than 10%, taking into account the habitat requirements of *V. speciosa*	In order to avoid negative impacts on the Killarney fern (*Vandenboschia speciosa*), its habitat requirements (site hydrology, relative humidity, canopy cover, shading levels, etc.) must be taken into account in locations that are subject to or proposed for management actions to control invasive non-native and/or vigorous native plant species. Based on Ní Dhúill et al. (2015, in prep.), NPWS (2019) and NPWS internal files

Bá Thrá Lí



Legend

Slieve Mish Mountains SAC 002185

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Department of Housing, Local Government and Heritage

MAP 1:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
SAC DESIGNATION

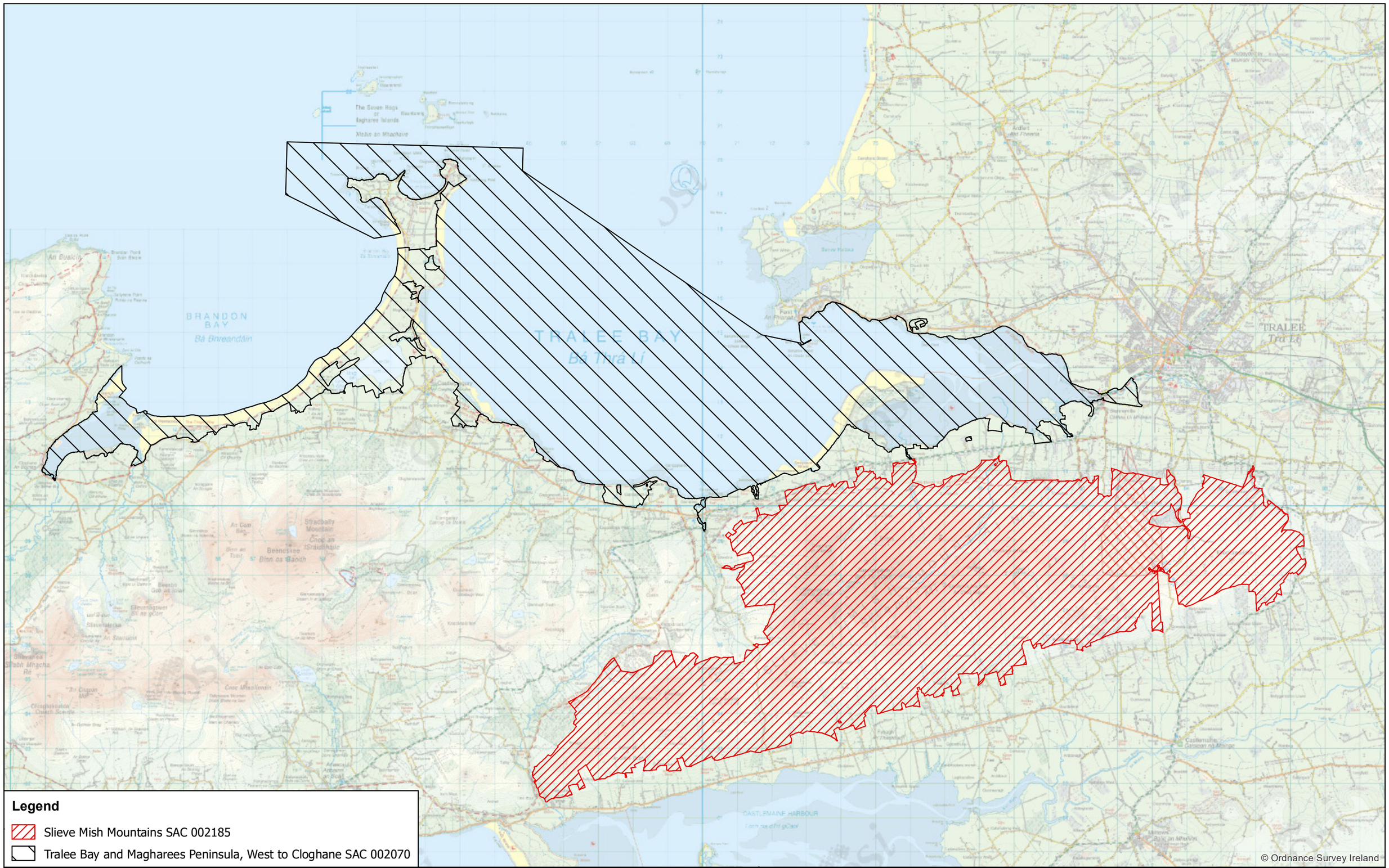
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



Legend

- Slieve Mish Mountains SAC 002185
- Tralee Bay and Magharees Peninsula, West to Cloghane SAC 002070

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MAP 2:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
ADJACENT SITES

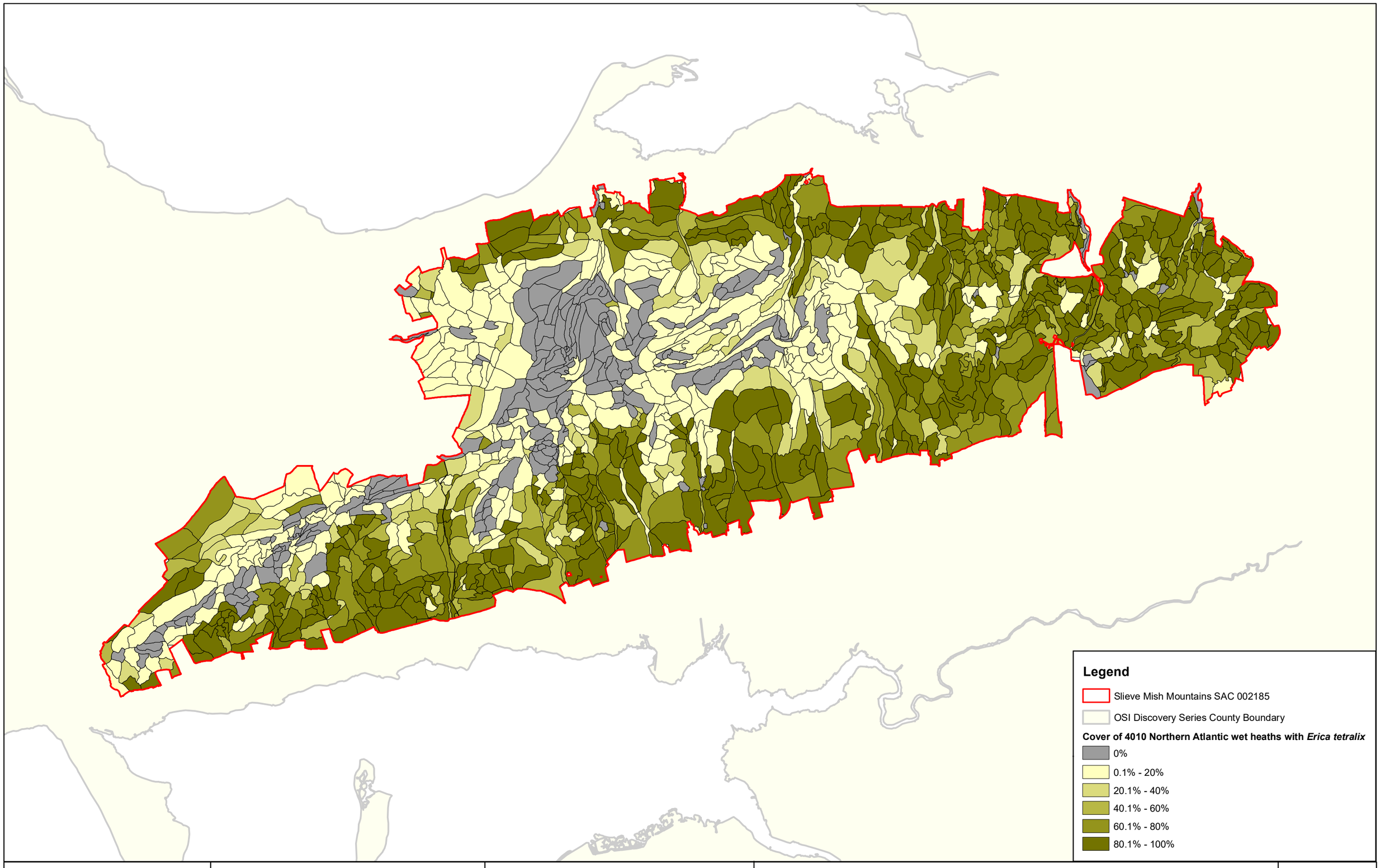
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.75 1.5 3 Kilometres

N

Date: October 2021



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MAP 3:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
WET HEATH

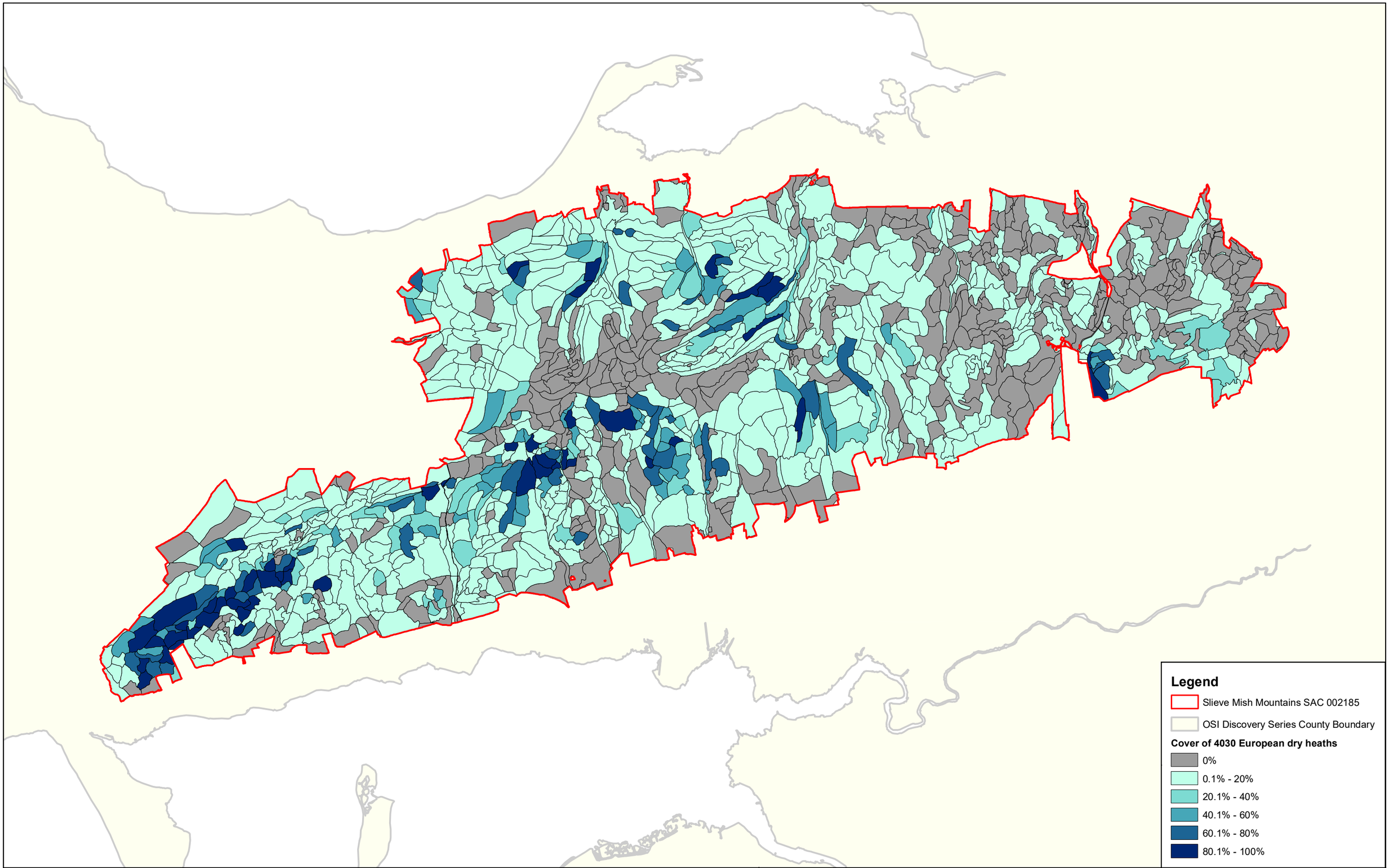
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



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MAP 4:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
DRY HEATH

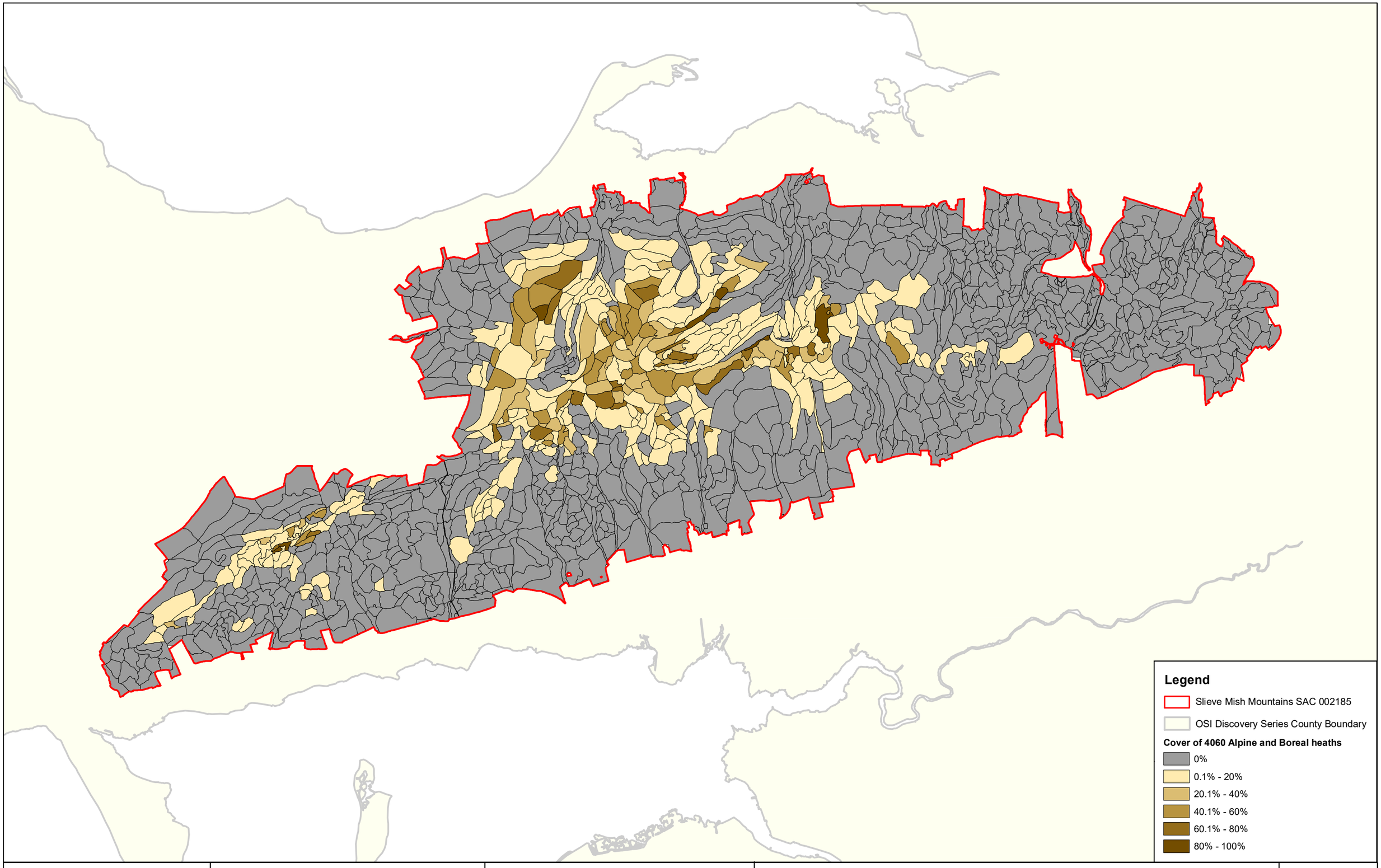
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



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MAP 5:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
ALPINE AND BOREAL HEATHS

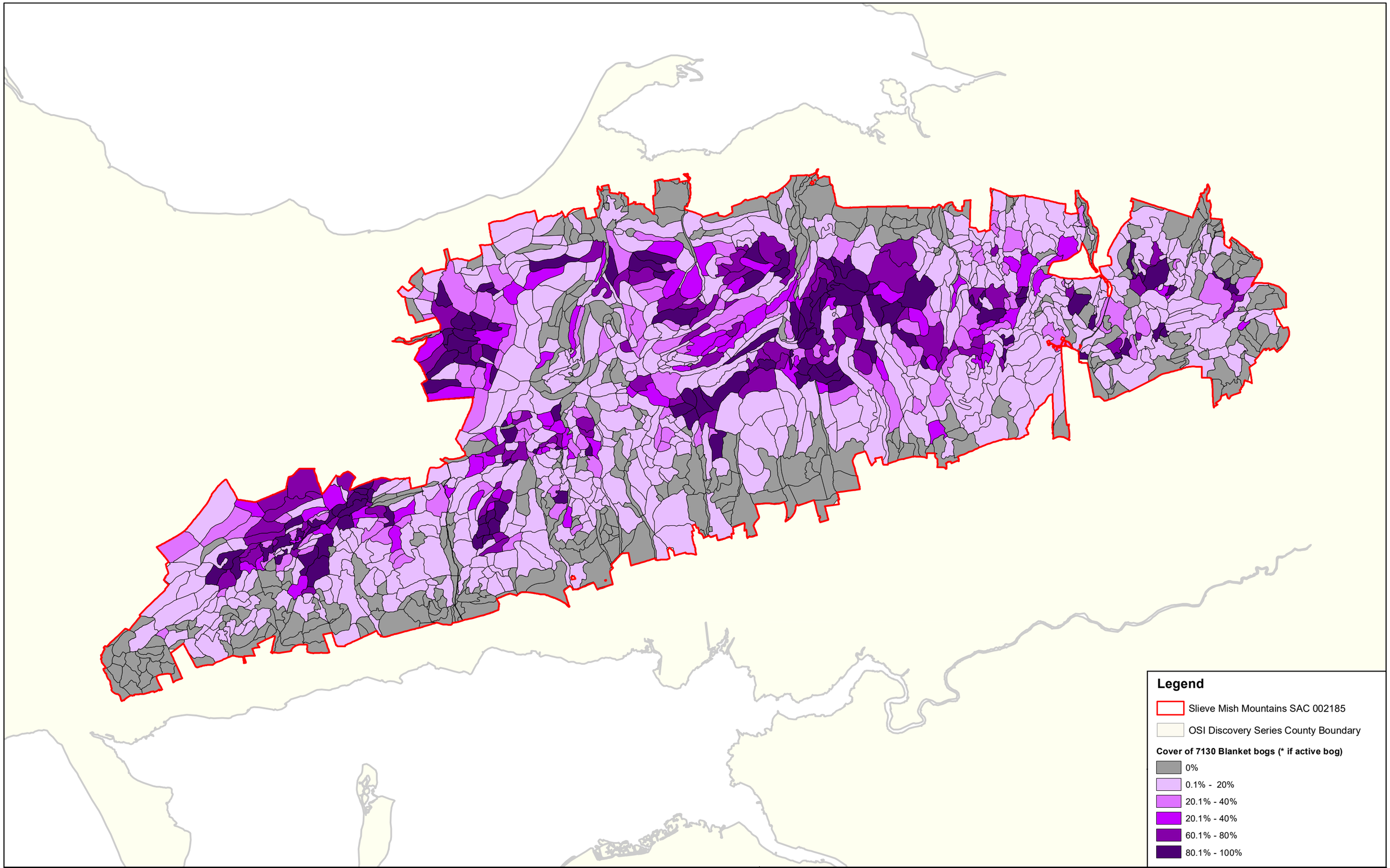
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



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MAP 6:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
BLANKET BOGS (* IF ACTIVE BOG)

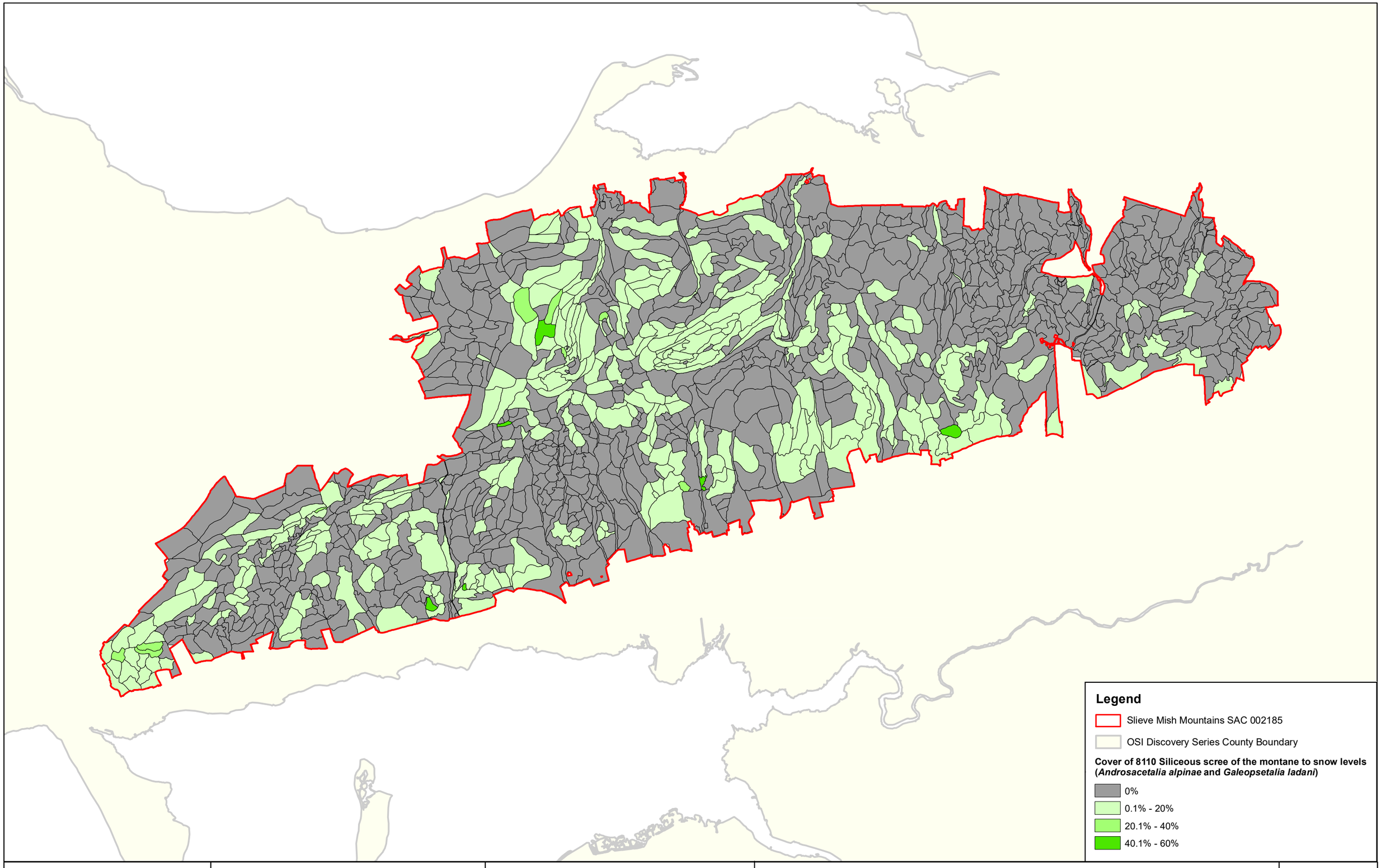
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



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MAP 7:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
SILICEOUS SCREE

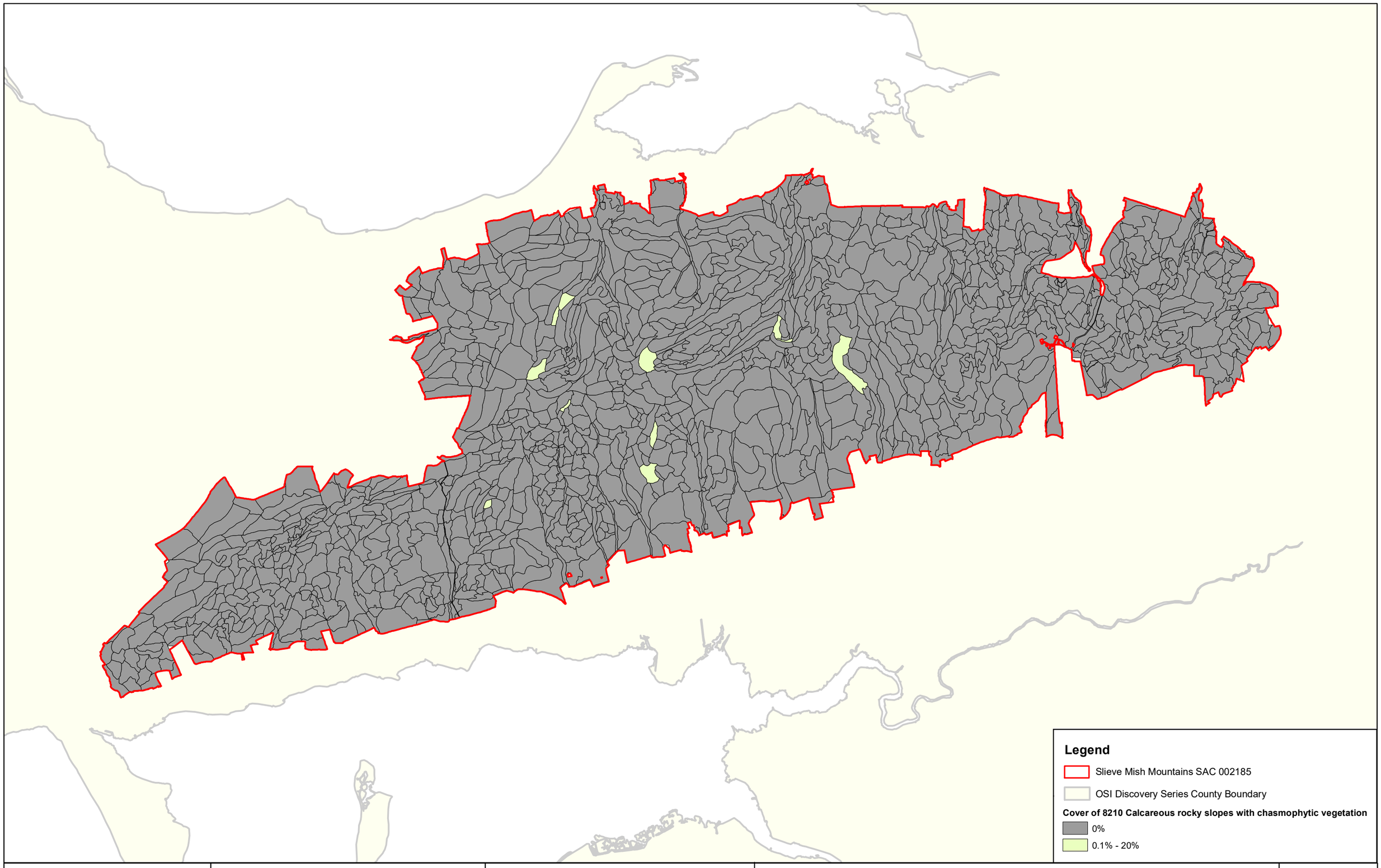
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

N

Date: October 2021



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MAP 8:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
CALCAREOUS ROCKY SLOPES

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

SITE CODE:
SAC 002185; version 3.01.
CO. KERRY

0 0.5 1 2 Kilometres

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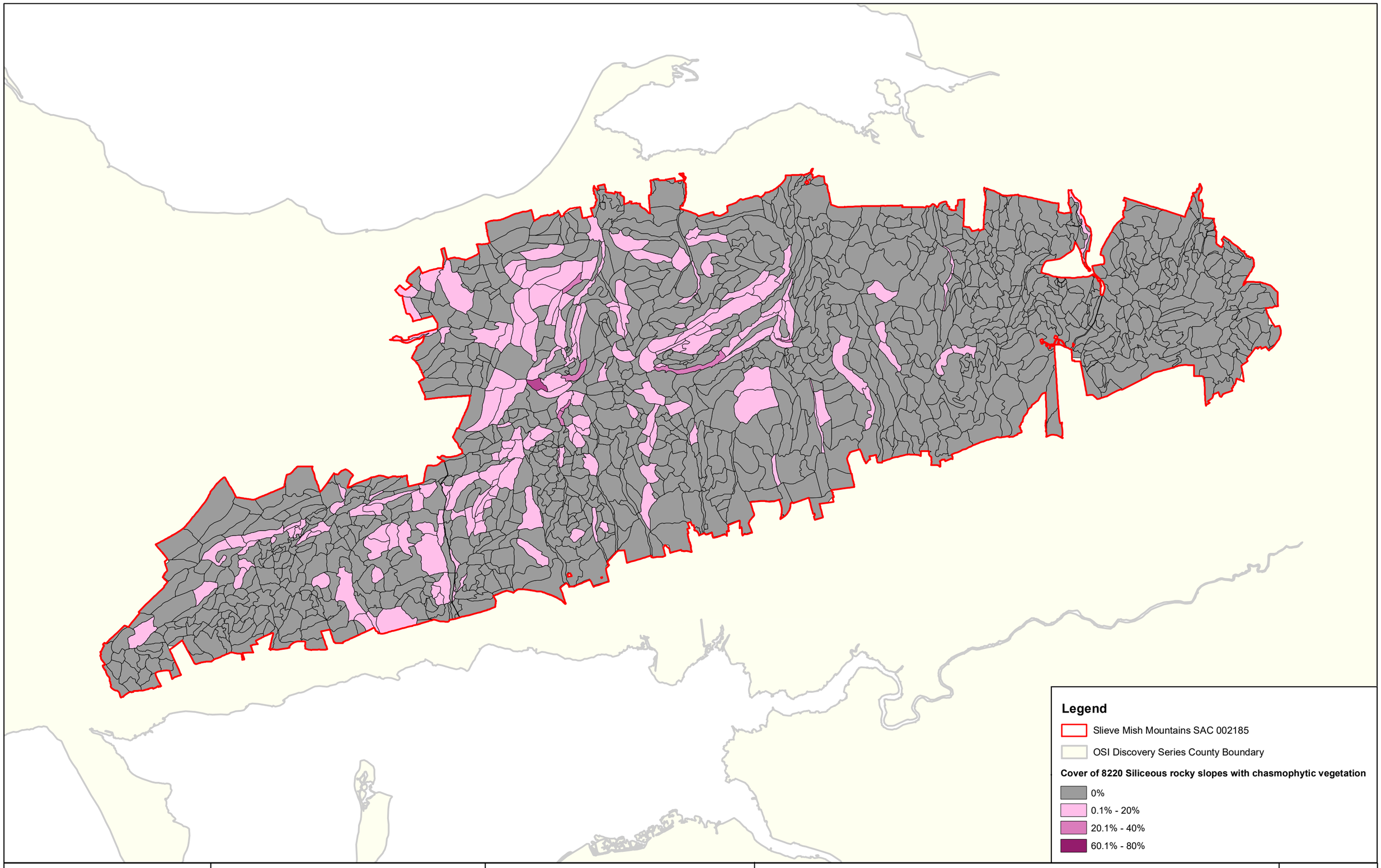
Date: October 2021



An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
Department of Housing, Local Government and Heritage

MAP 9:
SLIEVE MISH MOUNTAINS SAC
CONSERVATION OBJECTIVES
SILICEOUS ROCKY SLOPES

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

SITE CODE:
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CO. KERRY

0 0.5 1 2 Kilometres

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Date: October 2021