Cyfoeth Naturiol Cymru
Natural Resources Wales

LANDMAP
Cultural Landscape Services

E.-K. Naumann, Dr. K. Medcalf
Environment Systems

Report No 336

www.naturalresourceswales.gov.uk

Contents

1. Summary 2
2. Input data 3
3. Processing notes 3
   3.1. Data quality assurance 3
   3.2. Creation of reporting units 4
   3.3. Attribute table population 4
4. Using the new CLS layer 4
5. New CLS survey form 6
6. Integration with other current CLS projects 9
7. Appendix – Maps produced 10
   7.1. All Wales 10
   7.2. Caerphilly 18
   7.3. Ceredigion 26
   7.4. Monmouthshire 34
   7.5. Merthyr Tydfil 42

1. Summary

LANDMAP is a complete All-Wales GIS based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. LANDMAP comprises five spatially related datasets known as the Geological Landscape, Landscape Habitats, Landscape Habitats, the Historic Landscape and the Cultural Landscape, each approach is detailed in the LANDMAP methodology chapters (available from https://naturalresources.wales/planning-and-development/landmap/?lang=en). The five spatial layers are divided up into discrete geographical units (polygons in GIS) referred to as aspect areas. Each mapped aspect area is distinctly defined by its recognisable landscape characteristics and qualities. The survey record describes the elements, features, landscape qualities and landscape characteristics associated with each aspect area, together with an evaluation score for each aspect area and management recommendations. Individual surveys record information from the unique perspective of each LANDMAP layer, with each LANDMAP layer being produced independently.
The **LANDMAP Cultural Landscape** layer records associations with the landscape that are linked to cultural activity both tangible and intangible, it has primarily been used in the planning related arena and in landscape related decision making. Whilst this dataset was innovative in its inception (2003 & updated 2008 onwards) and is still a unique dataset, the grain of information in many areas needs improving and updating. This contract relates to the LANDMAP Cultural Landscape.

Responding to change. Recent environment and well-being legislation and developments in current thinking relating to culture suggest the dataset would benefit from a different approach to mapping if revisited. This would also provide an opportunity to contribute to current evidence gaps relating to culture and cultural services.

Cultural benefits are often perceived as being difficult to measure or access information about, as a result they are often overlooked and are not integrated into decision making. This omission reduces understanding about the benefits that people gain from the natural environment.

Benefits of changing to LANDMAP Cultural Landscape Services

For linking people with place
- Place based approach to mapping cultural services
- Opportunity for understanding connections between people and landscapes
- Opportunity for people to see how it relates to them and how they can contribute to the evidence or use it to build cases for local improvements

For landscape evidence
- Adapting with changing needs and demands for cultural services information across sectors
- Opportunity to monitor changes in cultural services
- Direct relevance to landscape sensitivity and capacity assessment in Wales where the resilience of cultural services under different change scenarios could be assessed
- Maps to highlight areas where provision/opportunity is significant and areas where action would be most beneficial, especially near people
- An opportunity to break down perceptions of an areas limited value where there is potential from a strong sense of culture

Opportunities for plans, strategies, statements, projects
- Help inform perceptions of the value of cultural services with the potential to improve recognition of their value and inform responses

- Cultural services element of Well-being Plans
- Potential to link to work on Mapping Natural Resource Opportunities for the National Development Framework & Area Statements
- Inclusion of cultural elements in development planning decisions and LDP
- Could link to National Indicators for Wales (WoFG) e.g. satisfied with local area as a place to live (22/26), arts, culture or heritage (35)
- 'Building on Landmap to reflect cultural heritage' as part of the 2017 report on Towards a New Research Programme for the Brecon Beacons National Park
- Linking to the Monmouth HLF heritage project for cultural services
- Link to potential indicators such as 'Quality and diversity of the landscape for Placemaking and Wellbeing'
- Source for grant aided projects with scope to link to delivery and outcomes

For use in Ecosystem services related work

- A potential source of information for Natural Capital Accounting for Area Statements
- SCANN, RHaN do not deliver in this area currently, and ONS uses a proxy indicator, this data could input and fill that evidence gap
- Potential research value for ONS guidance on cultural services provided by natural capital in the UK, cultural service accounts are not yet developed.

This new dataset will focus mapping on some key cultural services particularly linked to landscape but will in time include richer information in the surveys. This will be a significant step forward in delivering reliable, usable data that can be built upon and continually improved.

2. Input data

For the initial creation of the new Cultural Landscape Services (CLS) layer, information was drawn from existing datasets, whilst some fields will remain empty until they can be manually populated by further work for each aspect area. The datasets used for this project are:

- LANDMAP Visual and Sensory
- LANDMAP Geological Landscape
- LANDMAP Landscape Habitats
- LANDMAP Historic Landscape
- Wales Tranquil Areas
- World Heritage Sites
- Percentage of people identifying as Welsh by county (statswales.gov.wales)
- Percentage of people self-identifying as Welsh speakers (statswales.gov.wales)
- Dark sky reserves, boundaries provided by Brecon Beacons National Park Authority, Elan Valley Trust and Snowdonia National Park Authority

3. Processing notes

3.1. Data quality assurance

All input data was checked for a selection of data quality issues, namely gaps and overlaps. In cases where such issues were severe enough to have the potential to substantially affect results, these were addressed. This was the case for the LANDMAP Landscape Habitats layer as well as the LANDMAP Historic Landscape layer, both of which contained some large areas of overlapping polygons (polygons with the more recent survey data were given preference). Overlaps were treated as the more pressing data quality issue, as they would substantially affect the results

reported in the new CLS layer. Gaps within input polygon layers were reported upon as “unassessed” sites within the new CLS layer. During the data quality assurance phase, a missing polygon within the LANDMAP Visual and Sensory assessment became apparent, as did some missing polygons within the LANDMAP Geological Landscape layer; these gaps were addressed by NRW and resolved in time for the updated layers to have been used throughout this project.

3.2. Creation of reporting units

Reporting units were created based on existing LANDMAP Visual and Sensory polygons. Multi-part polygons were split into single-part and each of the resulting polygons given a new UID for the Cultural Landscape Services dataset. This process resulted in some sliver polygons caused by boundary inaccuracies in the original dataset. These were merged into the appropriate, adjacent polygons. Unique Identifier Codes (UIDs) for the new dataset were formed as: Area code (same as in LANDMAP Visual and Sensory e.g. abbreviation of local planning authority) + CLS + 3-digit numerical code.

3.3. Attribute table population

The cells in the attribute column were populated through overlap analysis of the new reporting units and the source data. The information was then summarised as outlined in section 5, describing the new survey form.

4. Using the new CLS layer

In summarising data to the new CLS aspect areas, the project aimed to balance the need for a limited number of attributes required for the data to easily give national-scale overviews, and the need for sufficient information to be contained within the attribute table to give an impression of the aspect areas cultural landscape services character. In cases where mosaic classes are reported (see section 5) it is recommended to create a colour scheme based only on the most dominant mosaic class (the one that is listed first) (Figure 1). Maps of a selection of the data created and/or summarised for the new CLS layer are presented in the appendix. These maps show information unique to the new CLS layer; information directly taken from other LANDMAP layers is not displayed in this summary document.

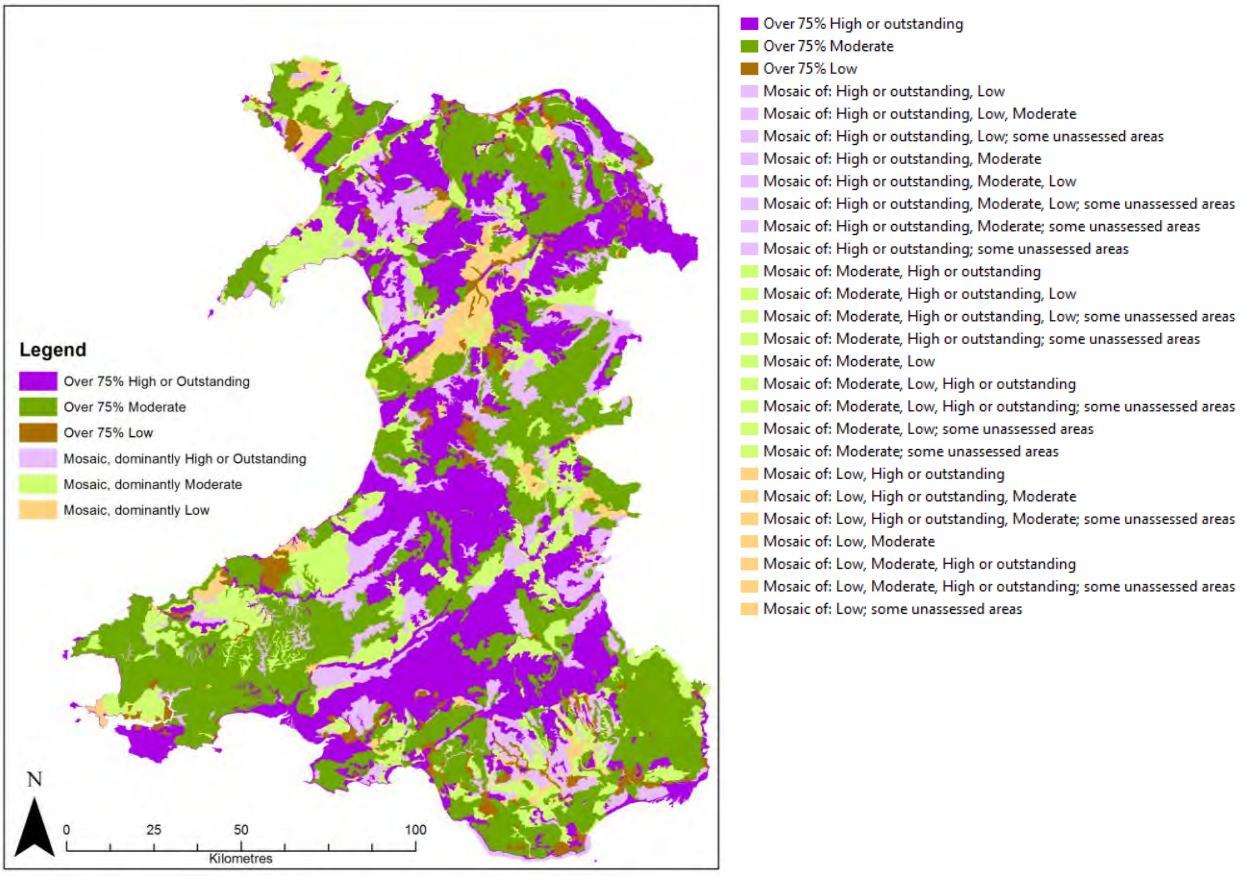


Figure 1: Example of possible colour scheme for national scale display for question LH25 in the new CLS layer (left) and how the classes have been grouped to create this colour scheme (right)

5. New CLS survey form

The new survey form contains information on how the values in the datasets were initially derived, and which questions will be associated with them in the survey forms used to update data going forward. For cases where information is directly derived from other LANDMAP layers, question codes for the new survey form are identical to the codes used in the source LANDMAP layers in order to retain this relationship; if the new CLS layer asks for additional information, this same code is prepended with "CLS_". Questions that are, within the LANDMAP suite of layers, unique to the new CLS layer are numbered as CLS questions, and follow-up questions appended with alphabetical codes.

Code	Question	Current information	Rules / How derived
VS19	Night time light pollution	Derived from VS19	Due to full polygon overlap, value taken directly from VS19
VS22	Attractive views	Derived from VS22	Due to full polygon overlap, value taken directly from VS22
CLS_VS22	What are attractive views of/to?	To be populated through survey form only	
VS24	Perceptual and sensory qualities	Derived from VS24	From VS24, only qualities deemed highly relevant for cultural services data are considered (Tranquil, Wild, Spiritual); due to full polygon overlap, relevant values taken directly from VS24
CLS_VS24	Additional cultural, perceptual and sensory qualities and comment	To be populated through survey form only	
CLS4	Wales Tranquil Area assessment	Derived from LUC_TYPE in TranquilAreasWales	Summarised: If: Any percentage > 75% → Take that value Else: Mosaic of all values that have a percentage > 0%, starting with the dominant class
CLS8	International Dark Sky Reserve or Dark Sky Reserve	Derived from dark sky SHPs (BBNP, SNPA and Elan Valley)	Report name of all sites that are (at least) partly within the polygon
VS25	Sense of place/ local distinctiveness	Derived from VS25	Due to full polygon overlap, value taken directly from VS25

CLS_VS25	What contributes to sense of place/distinctiveness?	To be populated through survey form only	
VS26	Visual and sensory landscape evaluation	Derived from VS26	Due to full polygon overlap, value taken directly from VS26
VS51	Justification of Visual & Sensory landscape value	Derived from VS51	Due to full polygon overlap, value taken directly from VS51
VS46	Scenic quality	Derived from VS46	Due to full polygon overlap, value taken directly from VS46
VS48	Character	Derived from VS48	Due to full polygon overlap, value taken directly from VS48
GL16D	Geological Landscape evaluation	Derived from GL16	Summarised: If: Any percentage > 75% → Take that value Else: Mosaic of all values that have a percentage > 0%, starting with the dominant class Note that the values 'high' and 'outstanding' were combined for this assessment.
LH25D	Landscape Habitats evaluation	Derived from LH25	Summarised: If: Any percentage > 75% → Take that value Else: Mosaic of all values that have a percentage > 0%, starting with the dominant class Note that the values 'high' and 'outstanding' were combined for this assessment.
HL23D	Historic Landscape evaluation	Derived from HL23	Summarised: If: Any percentage > 75% → Take that value Else: Mosaic of all values that have a percentage > 0%, starting with the dominant class Note that the values 'high' and 'outstanding' were combined for this assessment.
CLS1	Are there any art/artistic expressions associated with the landscape/area?	To be populated through survey form only	

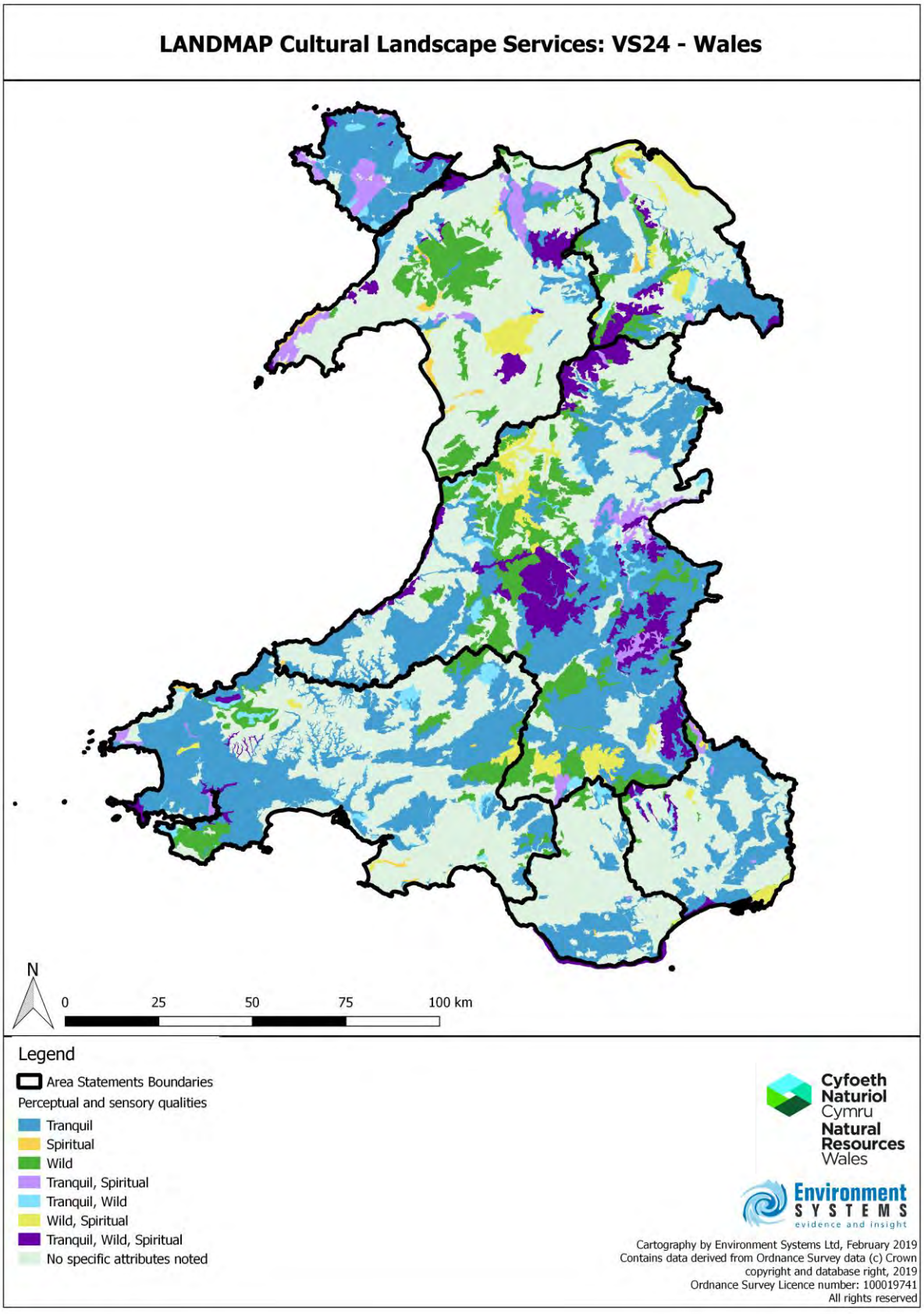
CLS1a	Details of art/artistic expressions that are associated with the area	To be populated through survey form only	
CLS2	Are there any folklore/ legends associated with the landscape/area?	To be populated through survey form only	
CLS2a	Details of folklore/legends associated with the area	To be populated through survey form only	
CLS3	Are there any events/traditions associated with the landscape/area?	To be populated through survey form only	
CLS3a	Details of events/traditions associated with the area	To be populated through survey form only	
CLS5	World Heritage Sites present	Derived from World Heritage data	Report name of all sites that are (at least) partly within the polygon
CLS6	Feeling of Welsh national identity in the authority area	Derived from surveys reporting percentage of people self-identifying as Welsh	Reported as overall percentage for the area, calculated as weighted average (ignore areas in the equation that are blank in source data)
CLS7	Welsh language in the authority	Derived from surveys reporting percentage of people self-identifying as Welsh speakers	Reported as overall percentage for the area, calculated as weighted average (ignore areas in the equation that are blank in source data)

6. Integration with other current CLS projects

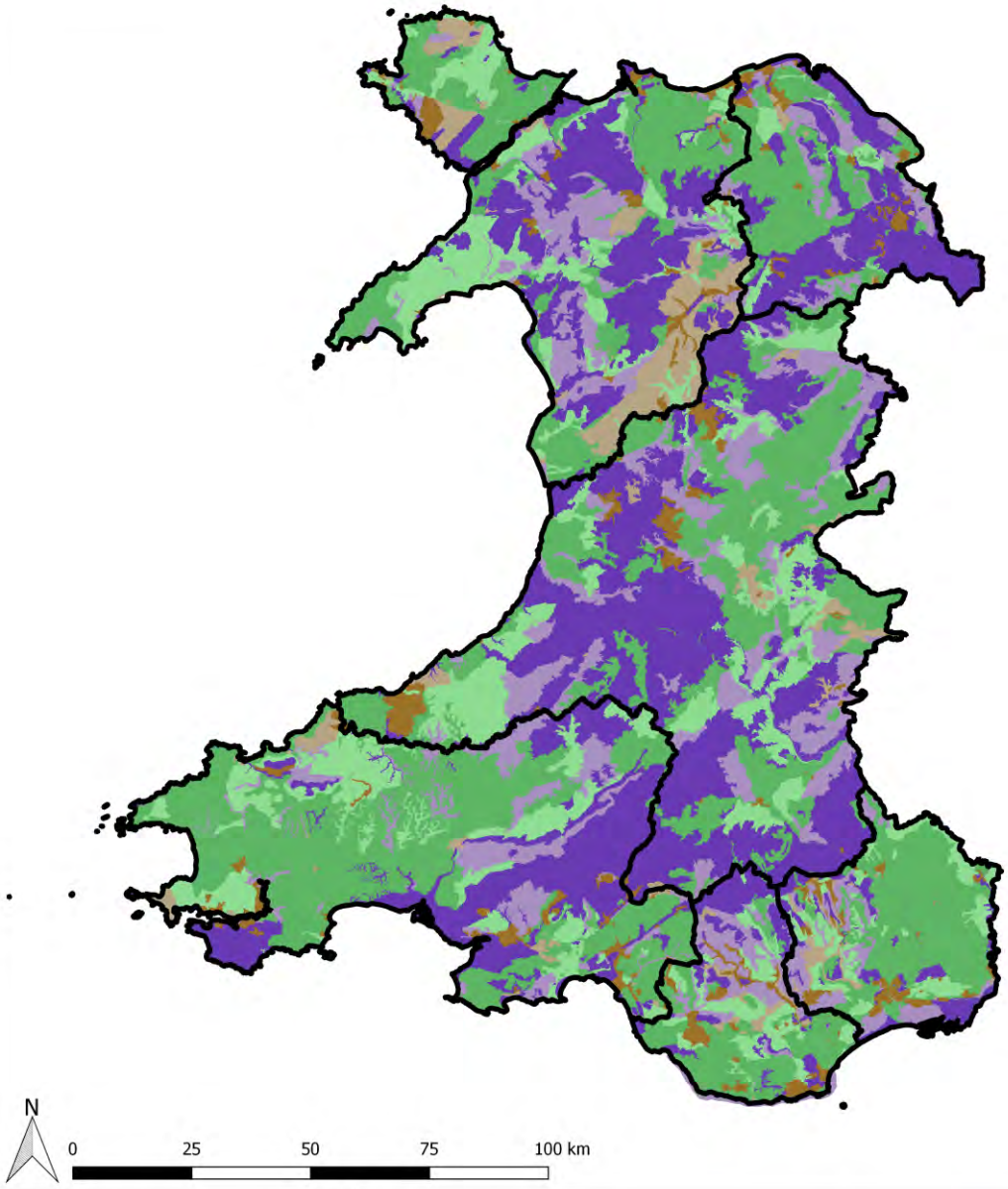
Concurrent to this project there is a second piece of work that will be using the entries on the Historic Environment Record (and potentially Welsh Placenames) to also identify and map key landscape cultural services that help to define sense of place and belonging and cultural heritage.

7. Appendix – Maps produced

7.1. All Wales



LANDMAP Cultural Landscape Services: LH25D - Wales



Legend

- Area Statements Boundaries

Landscape Habitats evaluation

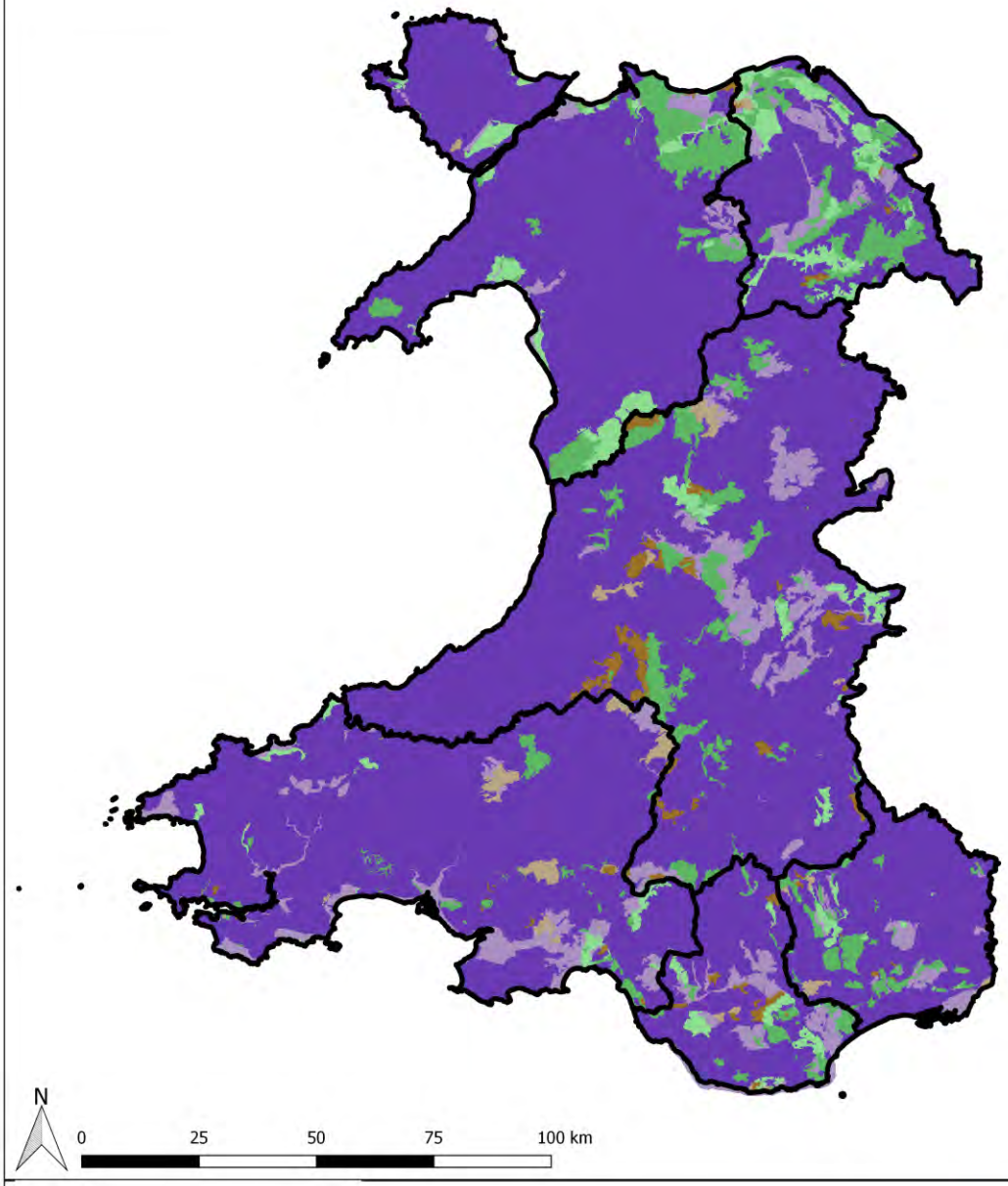
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: HL23D - Wales



Legend

- Area Statements Boundaries

Historic Landscape evaluation

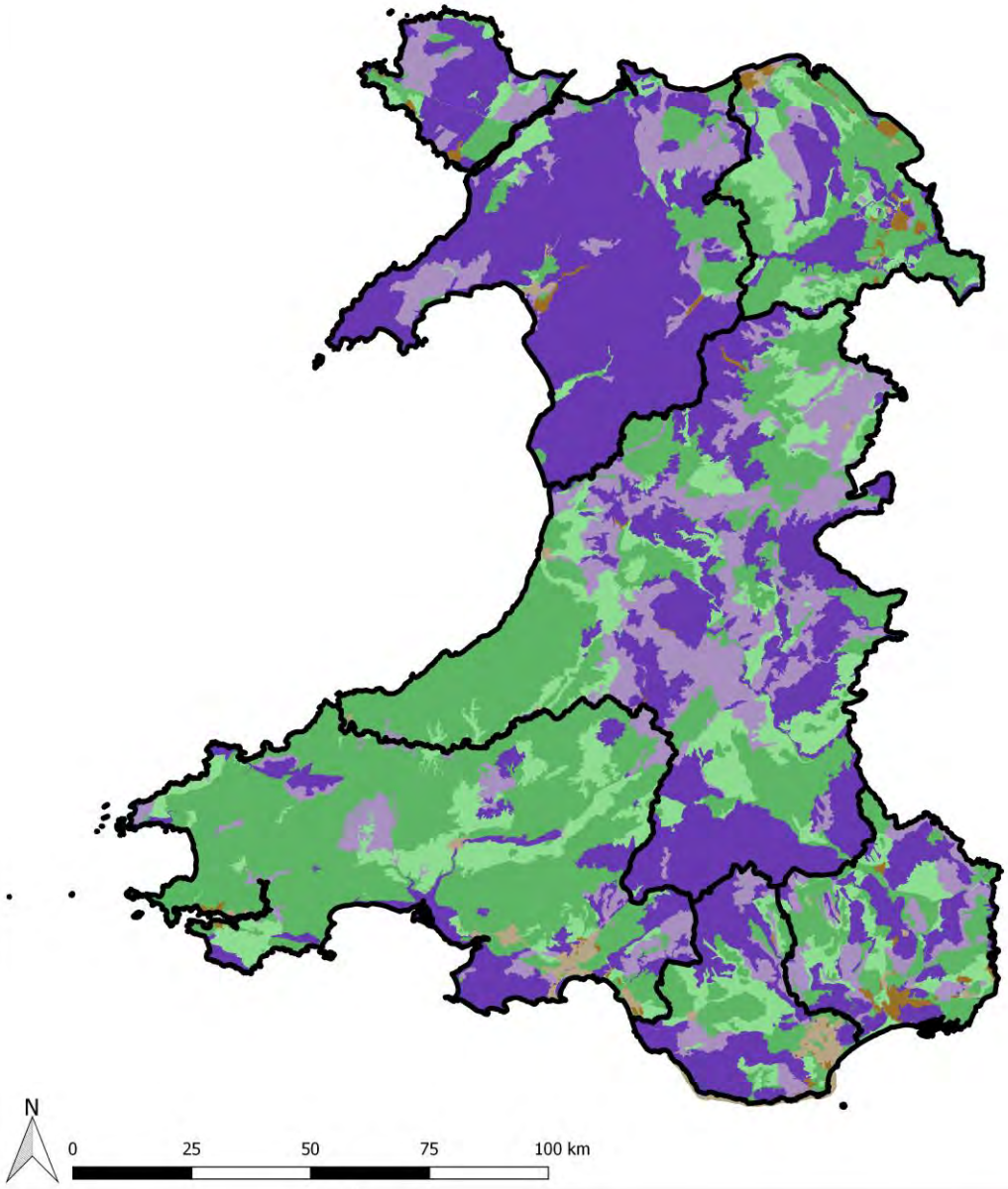
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: GL16D - Wales



Legend

- Area Statements Boundaries

Geological Landscape evaluation

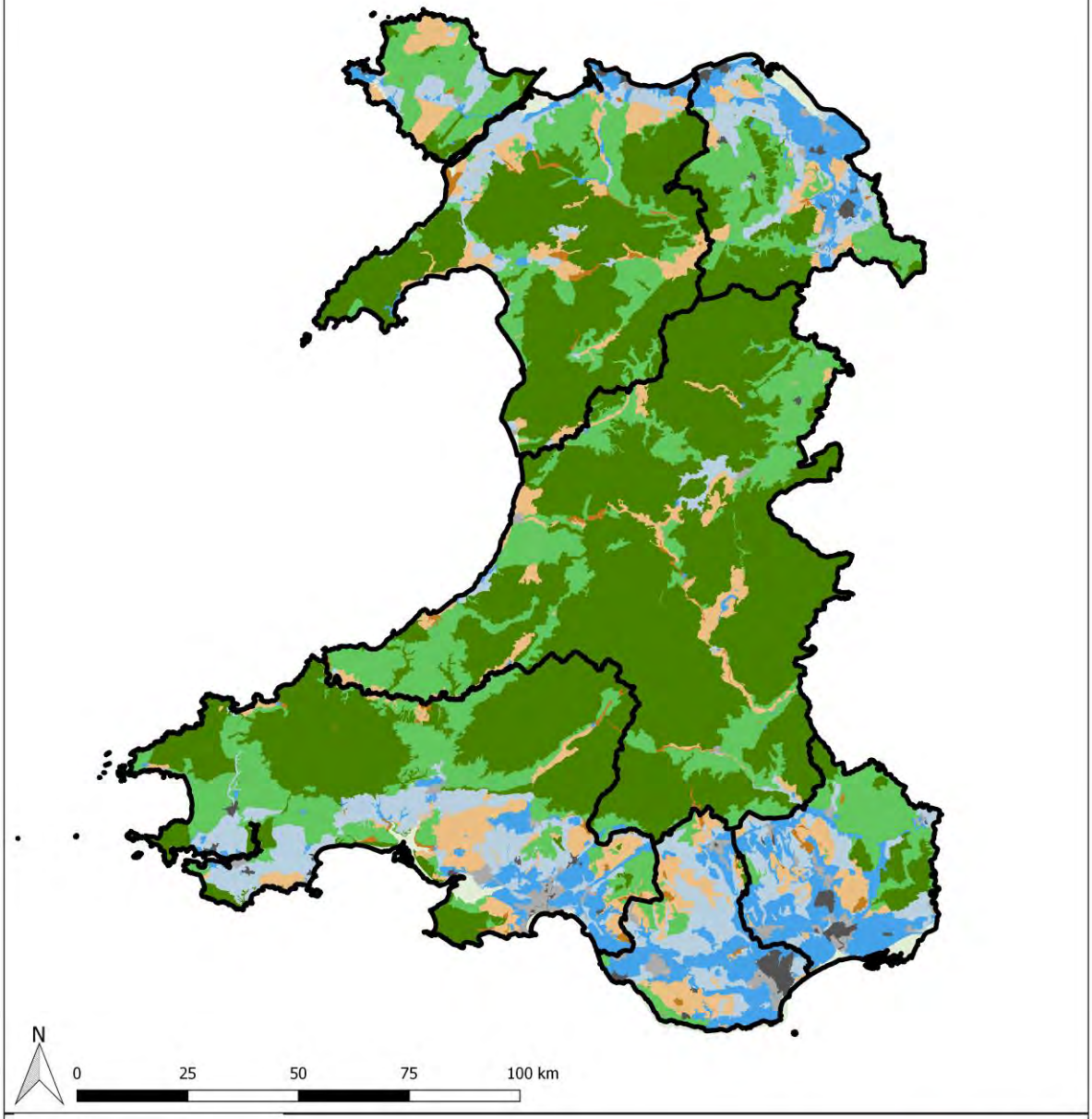
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS4 - Wales



Legend

- Area Statements Boundaries

Wales Tranquil Area assessment

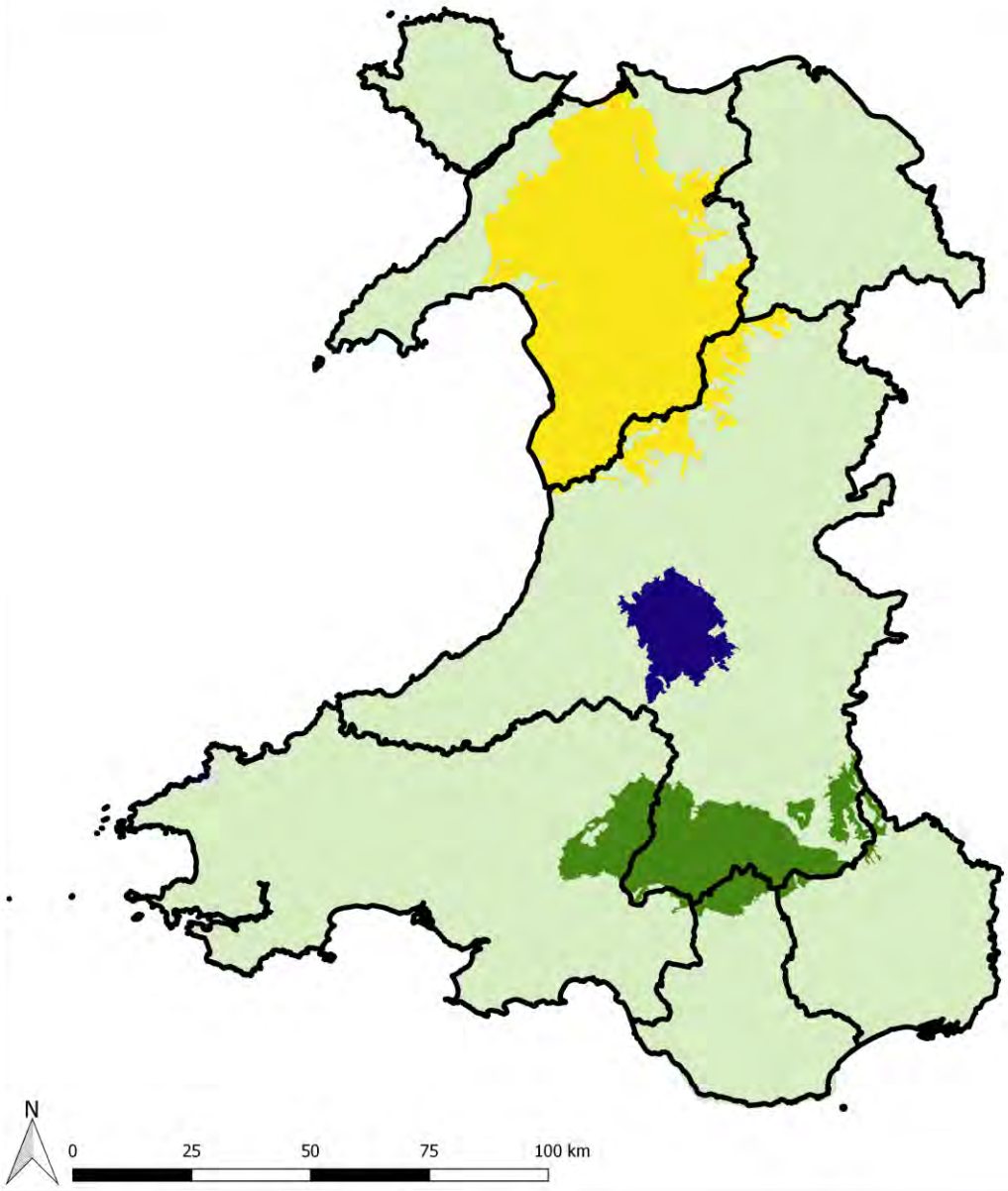
- Over 75% Undisturbed
- Over 75% Zone B
- Over 75% Zone C
- Over 75% Urban
- Over 75% unassessed
- Mosaic, dominantly undisturbed
- Mosaic, dominantly Zone B
- Mosaic, dominantly Zone C
- Mosaic, dominantly urban

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS8 - Wales



Legend

- Area Statements Boundaries

International Dark Sky Reserve or Dark Sky Reserve

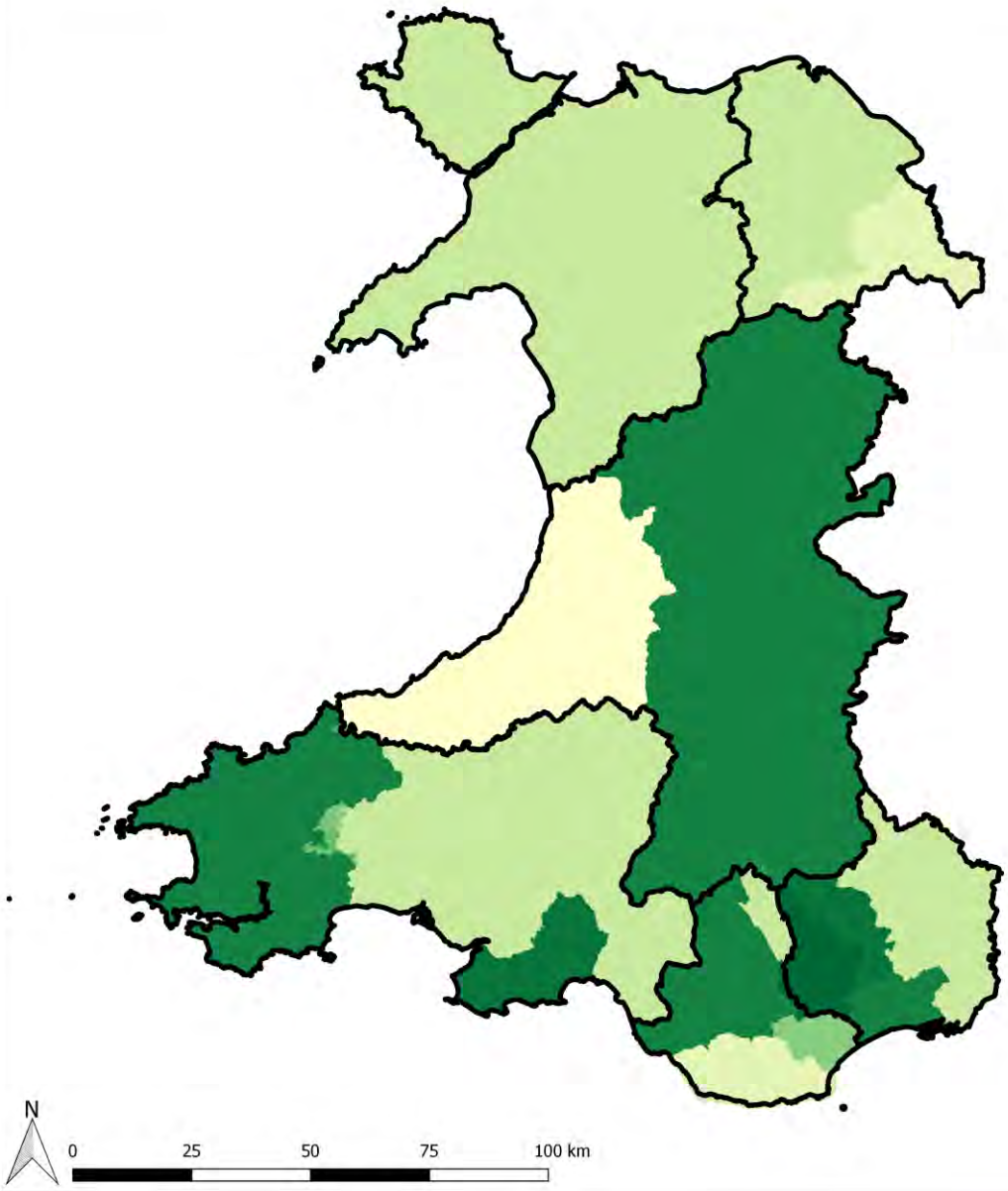
- Brecon Beacons National Park Dark Sky Reserve
- Elan Valley Dark Sky Reserve
- Snowdonia National Park Dark Sky Reserve
- No dark sky reserve within

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS6 - Wales



Legend

Area Statements Boundaries

Feeling of Welsh national identity in the authority area

Least percentage of people identifying as Welsh

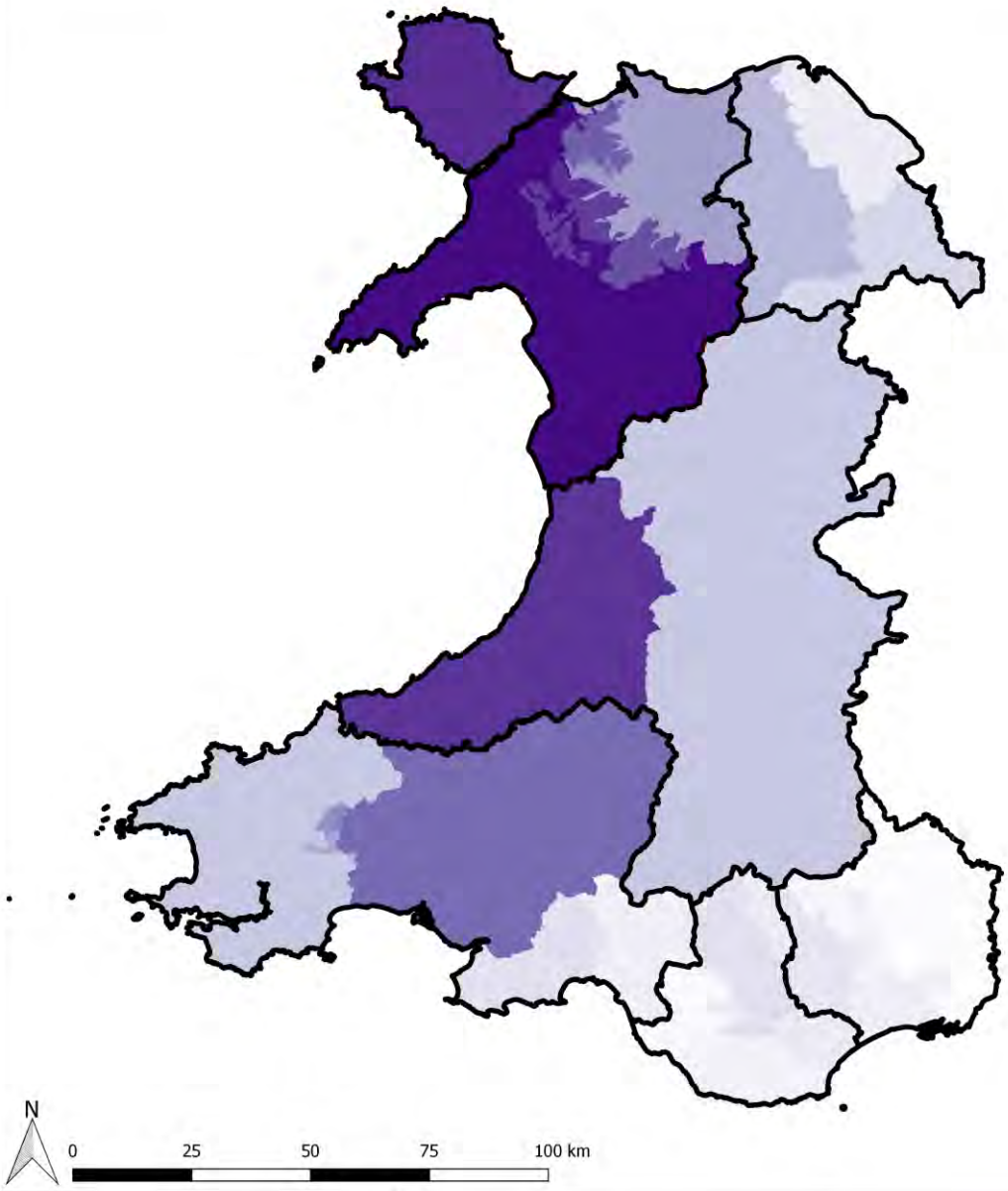
Highest percentage of people identifying as Welsh

Cyfoeth Naturiol Cymru
Natural Resources Wales

Environment SYSTEMS
evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS7 - Wales



Legend

Area Statements Boundaries

Welsh language in the authority

Least percentage of people speaking Welsh

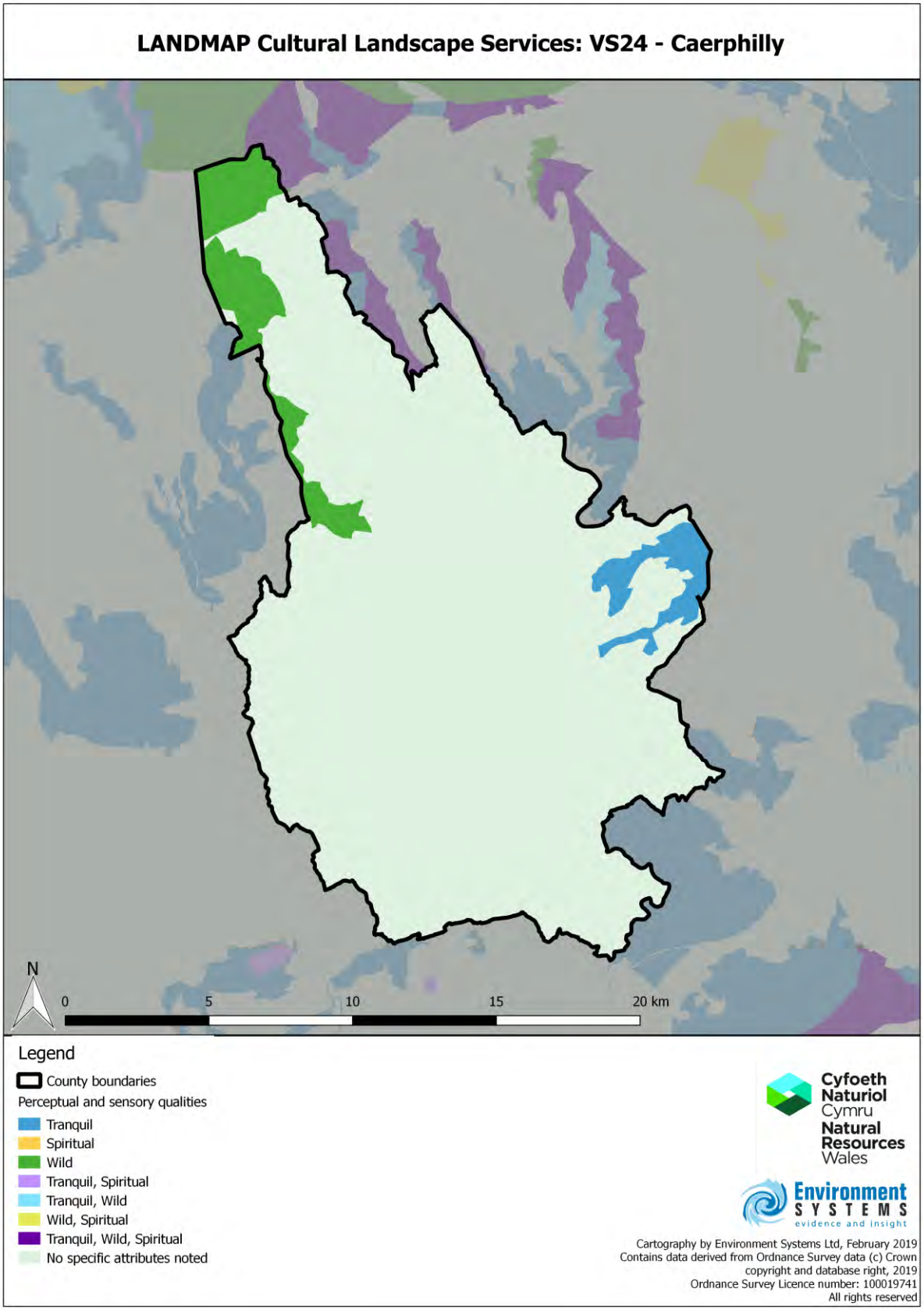
Highest percentage of people speaking Welsh

Cyfoeth Naturiol Cymru
Natural Resources Wales

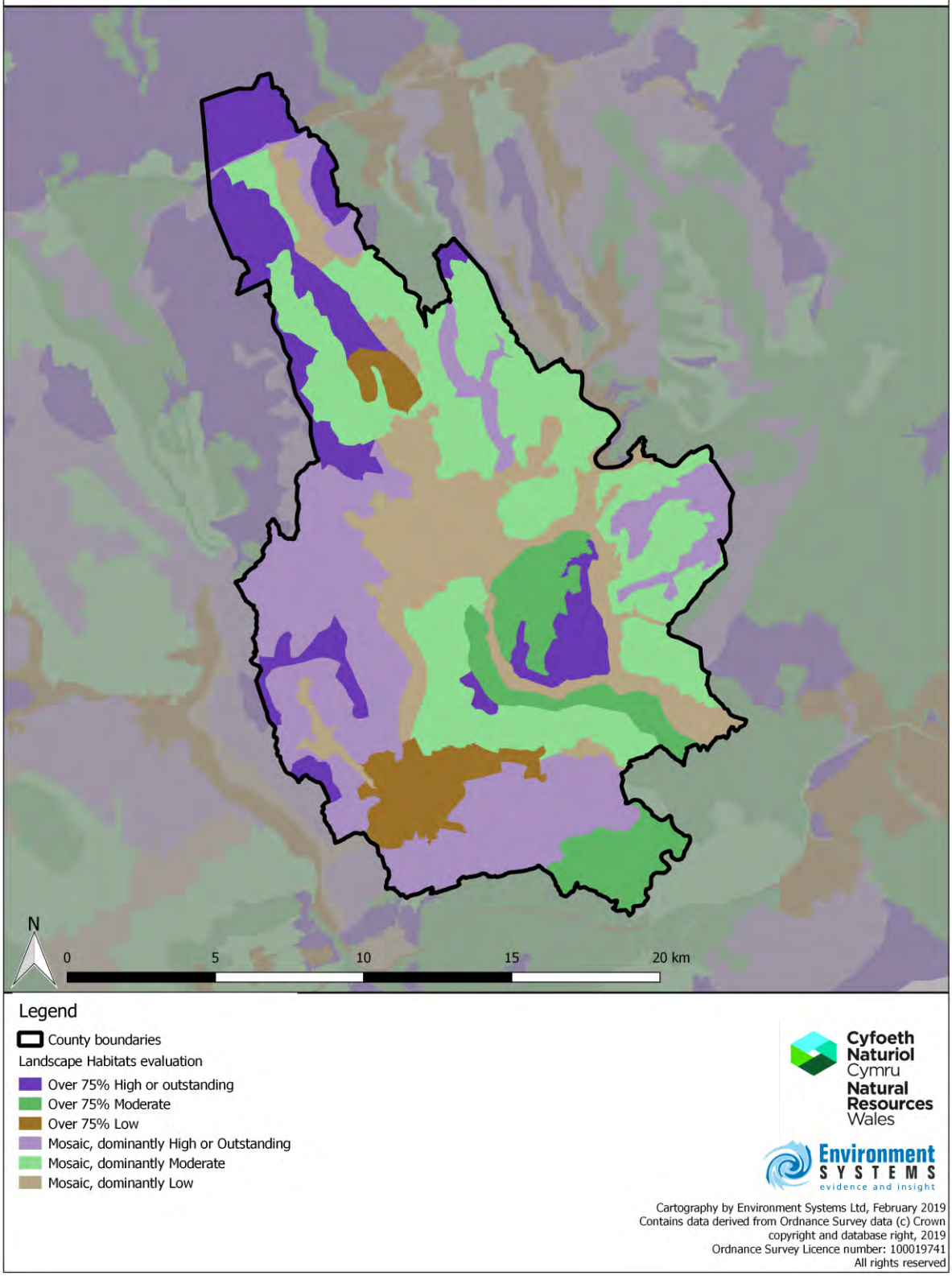
Environment SYSTEMS
evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

7.2. Caerphilly

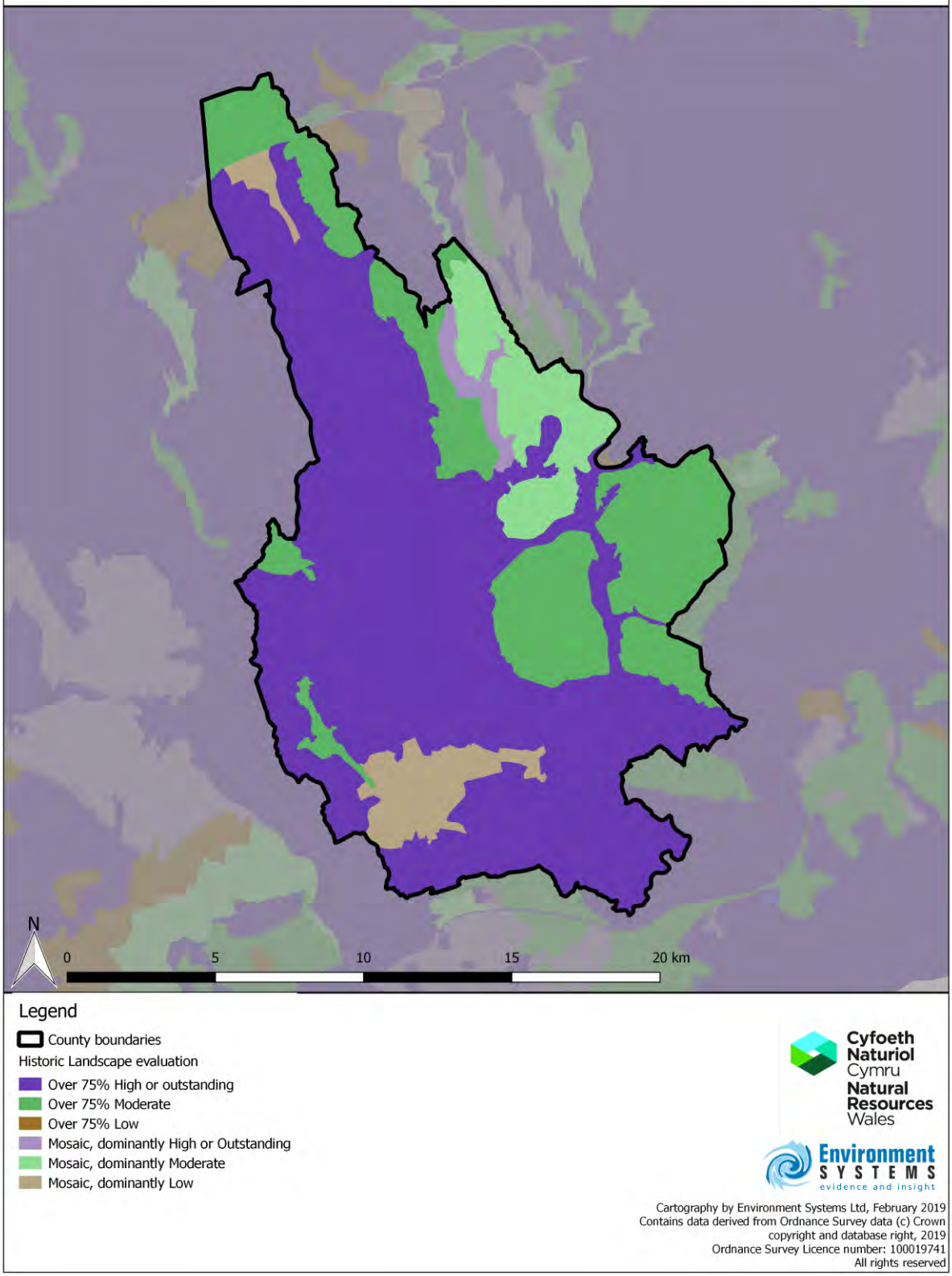


LANDMAP Cultural Landscape Services: LH25D - Caerphilly



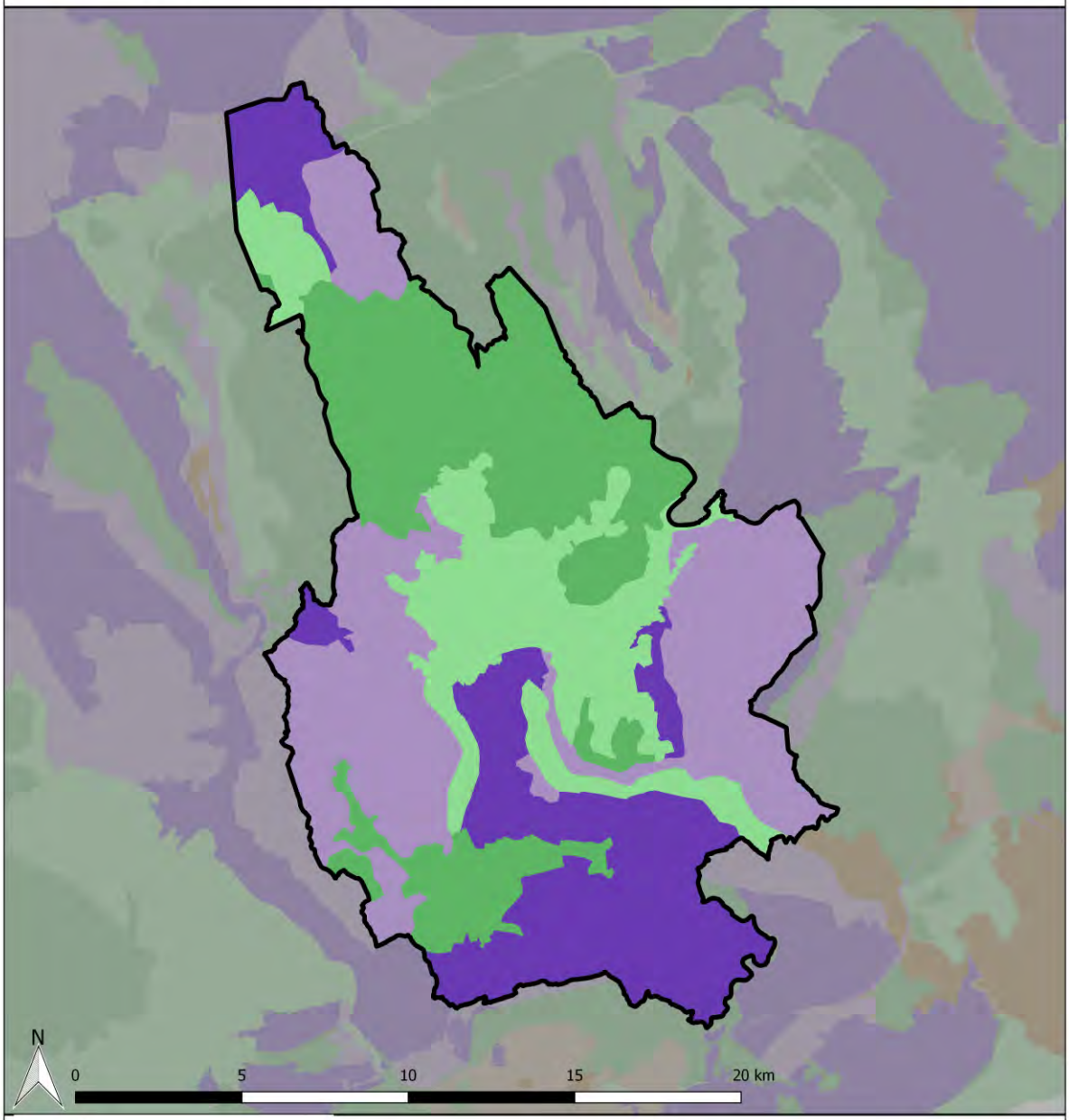
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: HL23D - Caerphilly



Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: GL16D - Caerphilly



Legend

- County boundaries

Geological Landscape evaluation

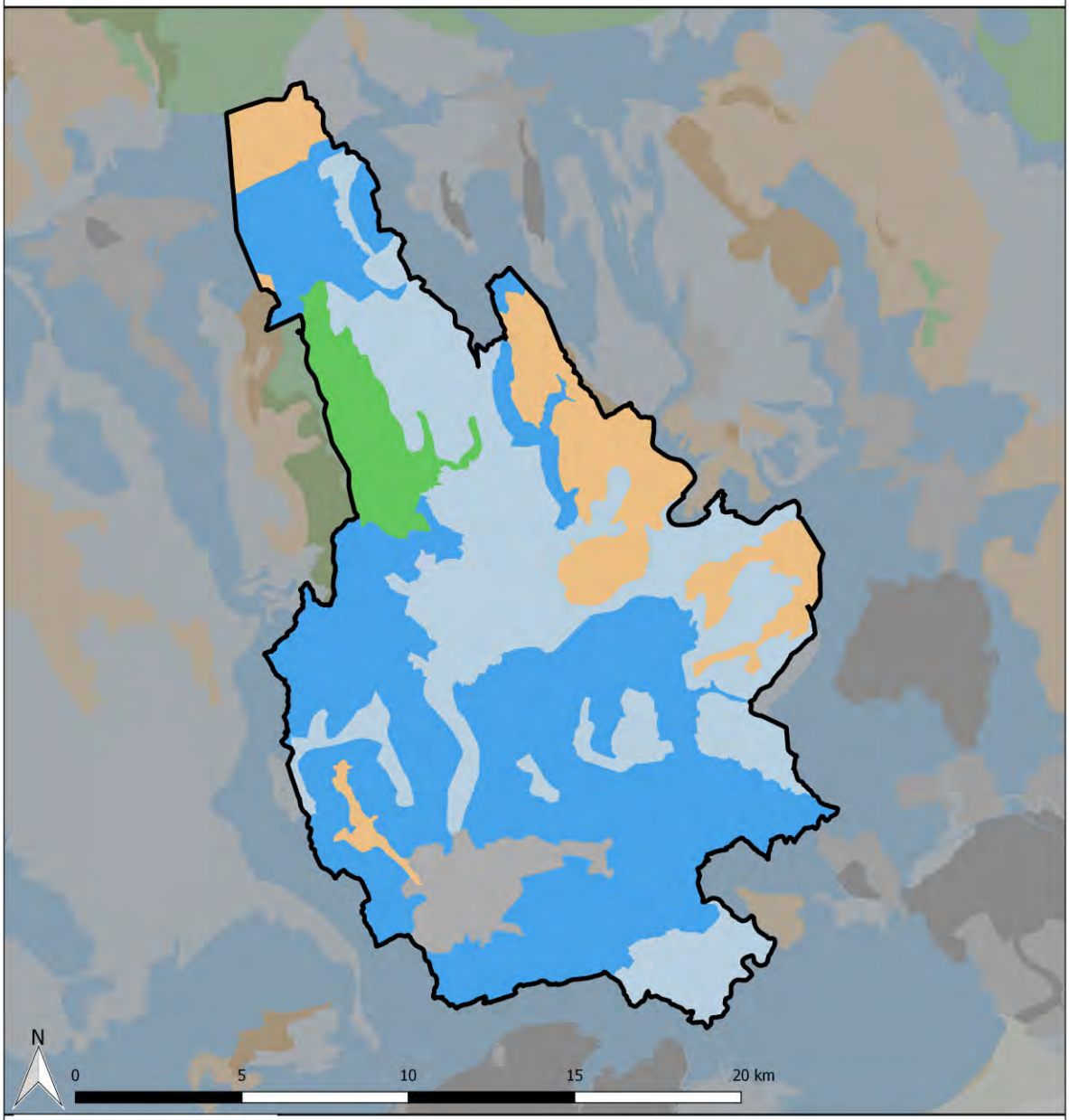
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS4 - Caerphilly



Legend

- County boundaries

Wales Tranquil Area assessment

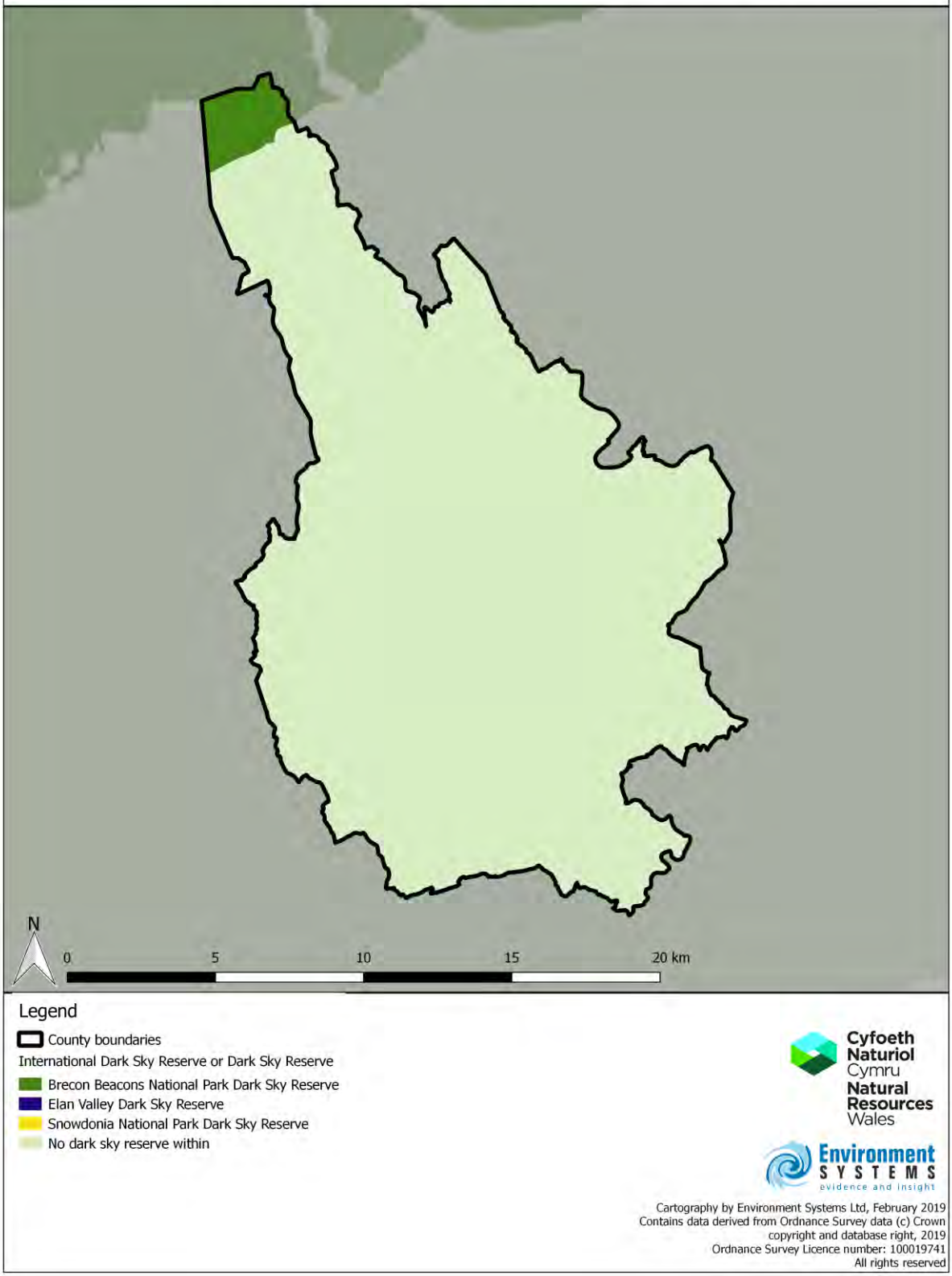
- Over 75% Undisturbed
- Over 75% Zone B
- Over 75% Zone C
- Over 75% Urban
- Over 75% unassessed
- Mosaic, dominantly undisturbed
- Mosaic, dominantly Zone B
- Mosaic, dominantly Zone C
- Mosaic, dominantly urban

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

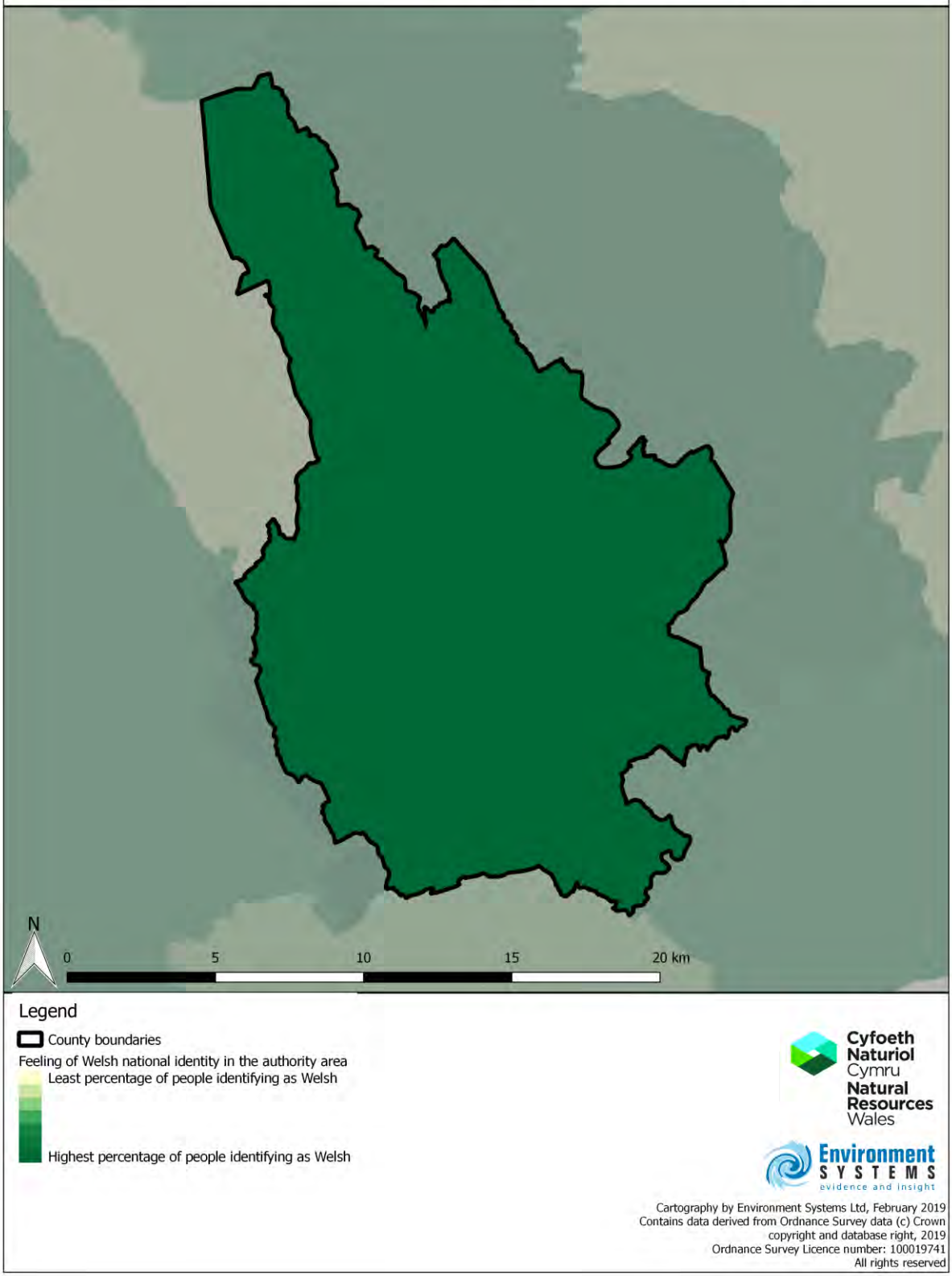
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS8 - Caerphilly



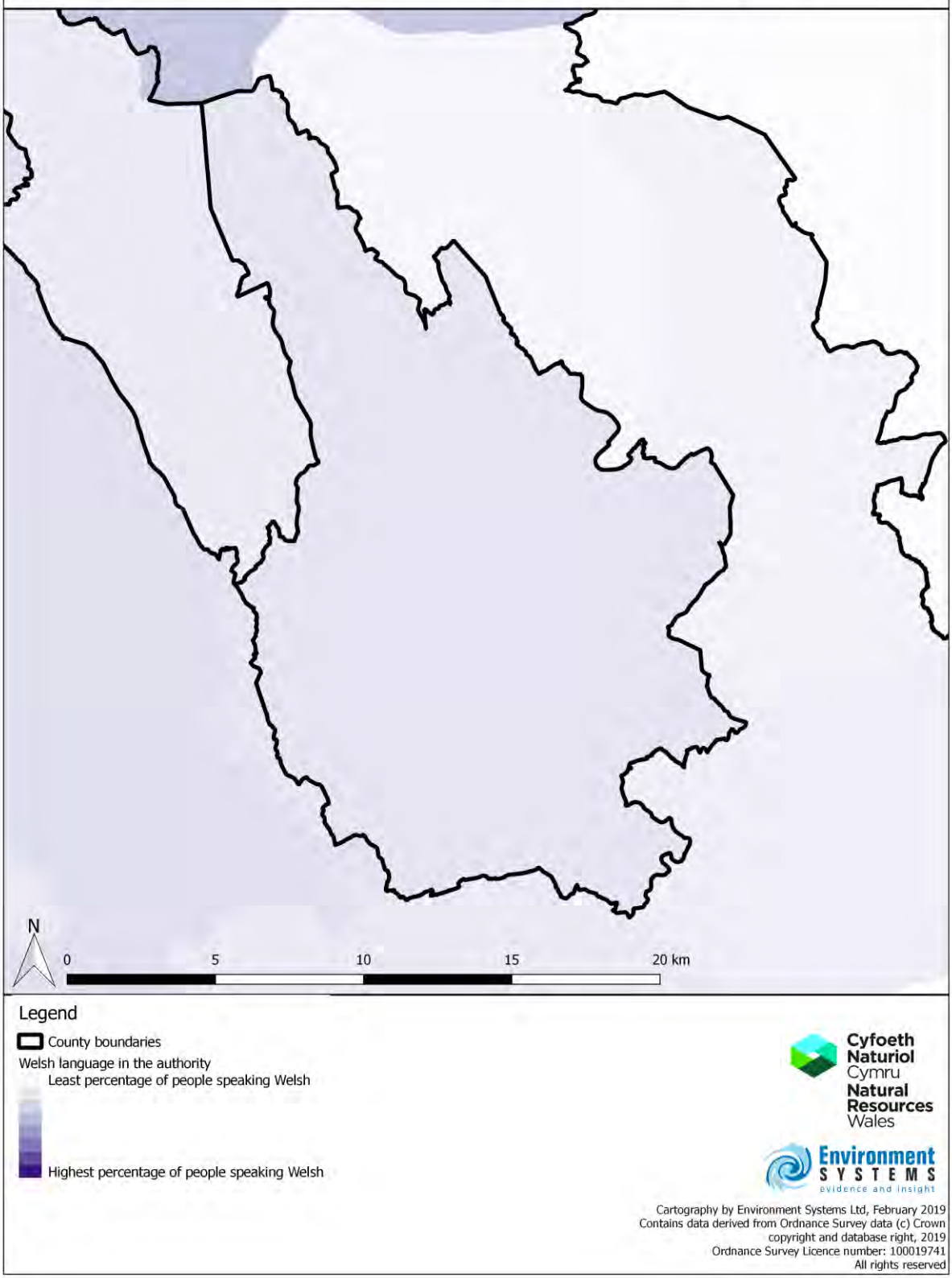
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS6 - Caerphilly

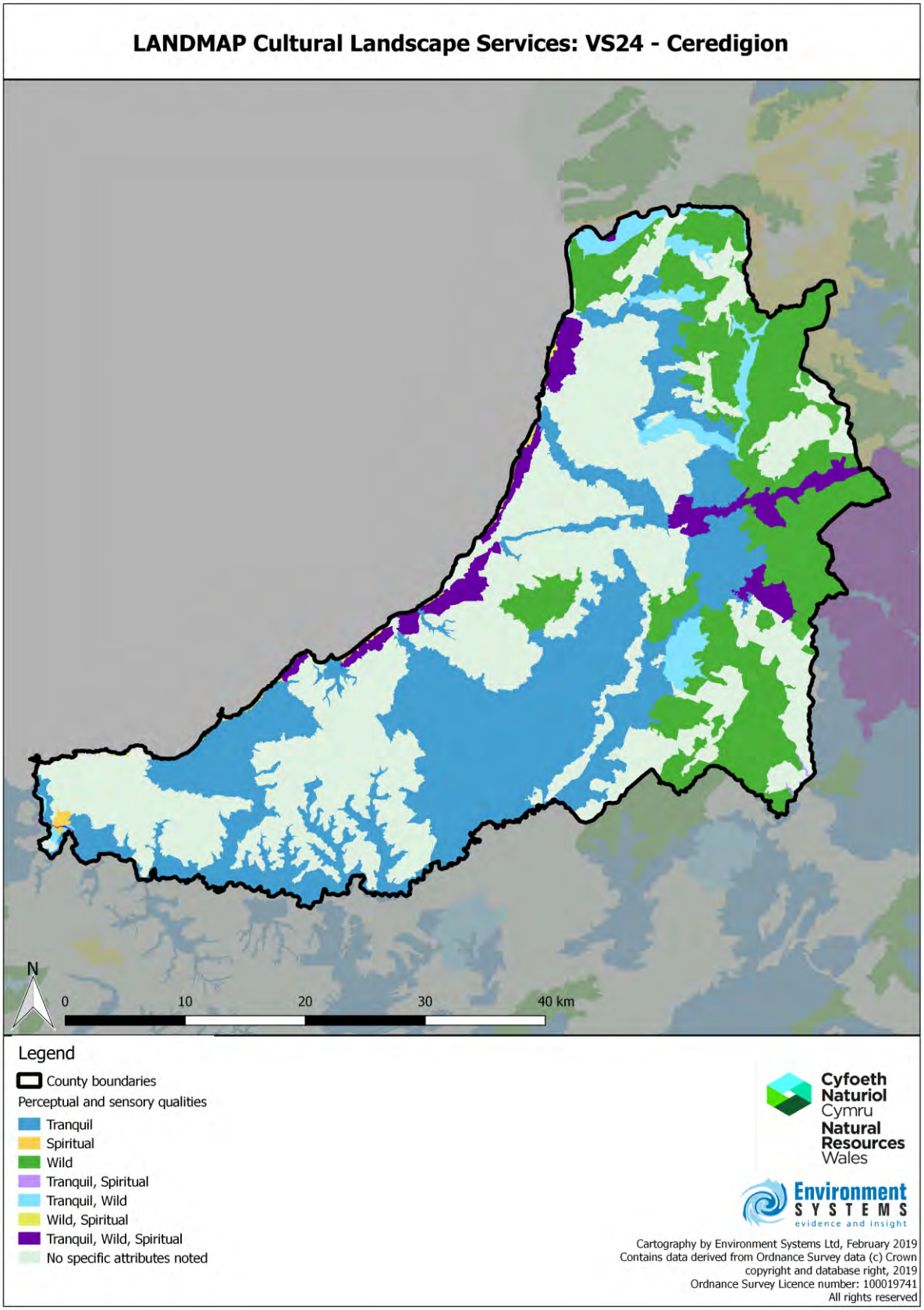


Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

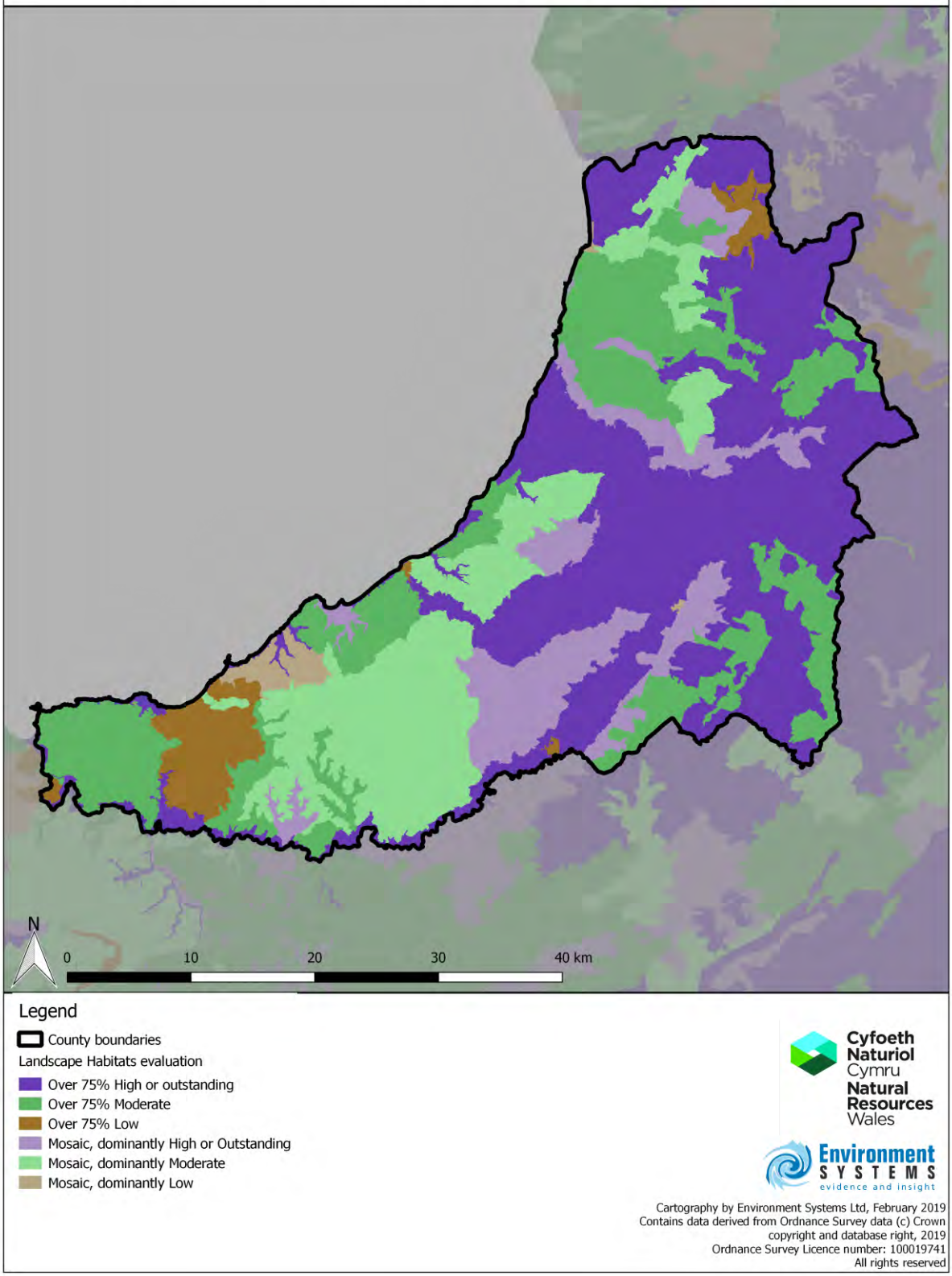
LANDMAP Cultural Landscape Services: CLS7 - Caerphilly



7.3. Ceredigion

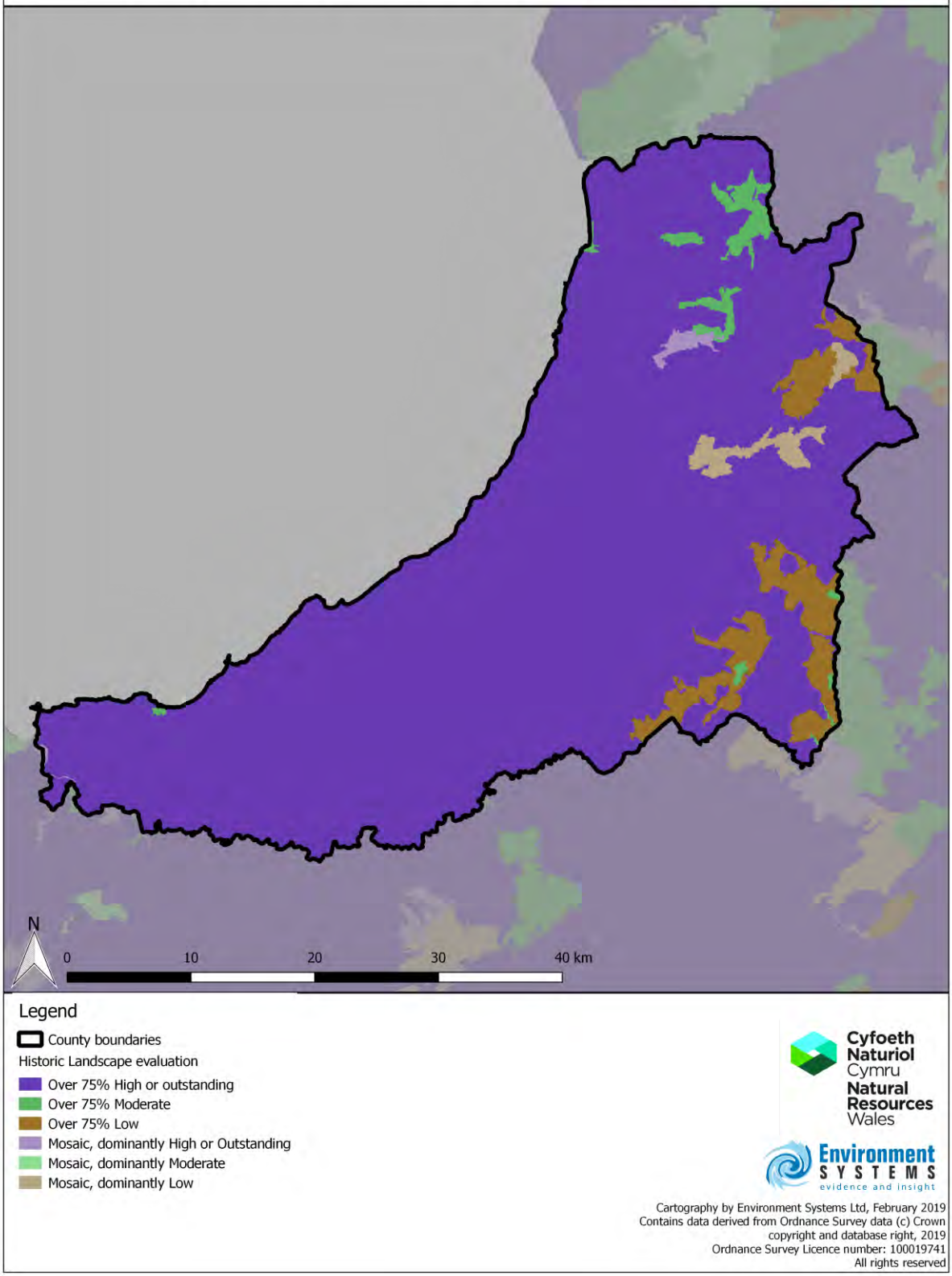


LANDMAP Cultural Landscape Services: LH25D - Ceredigion



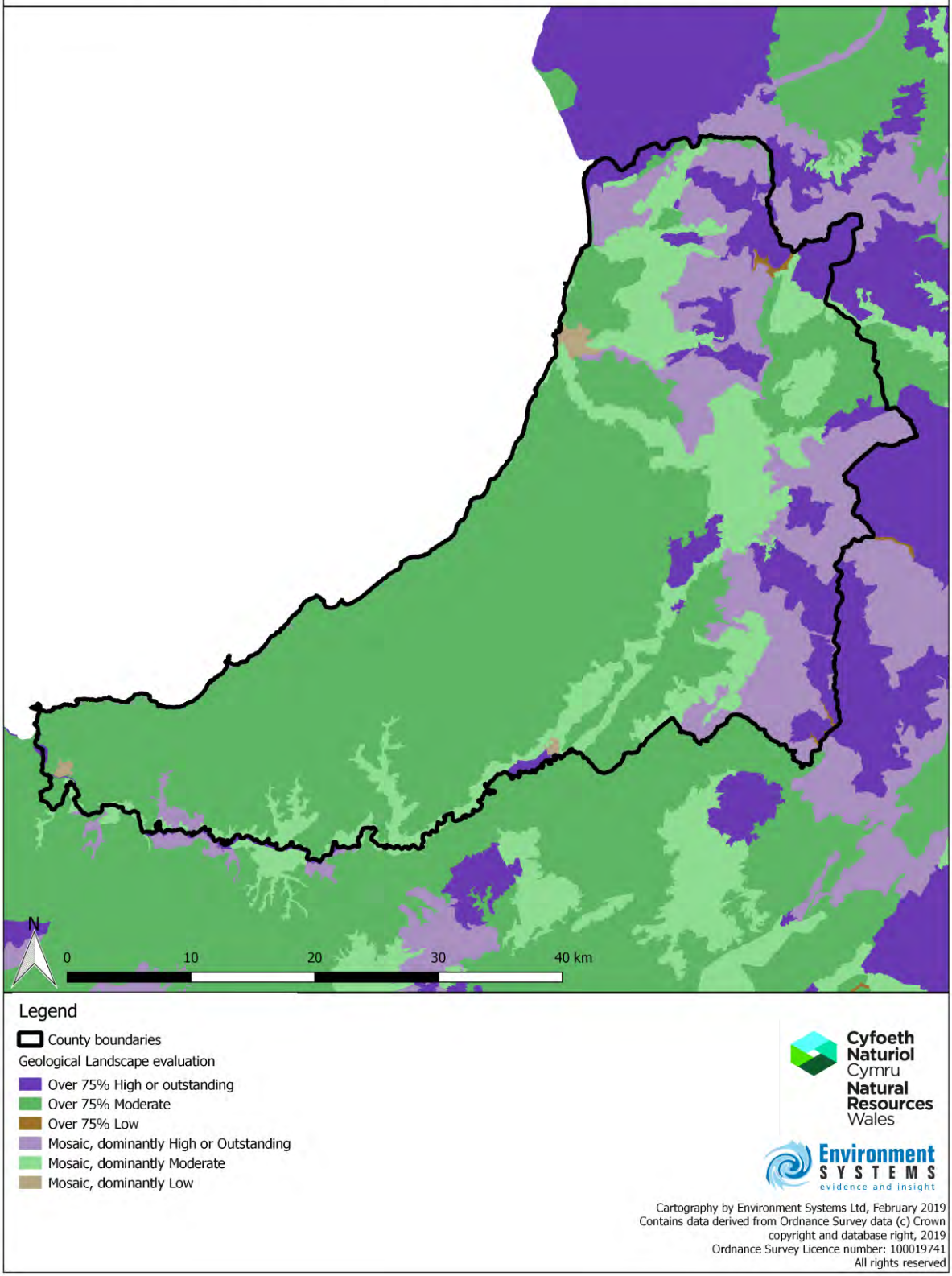
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: HL23D - Ceredigion



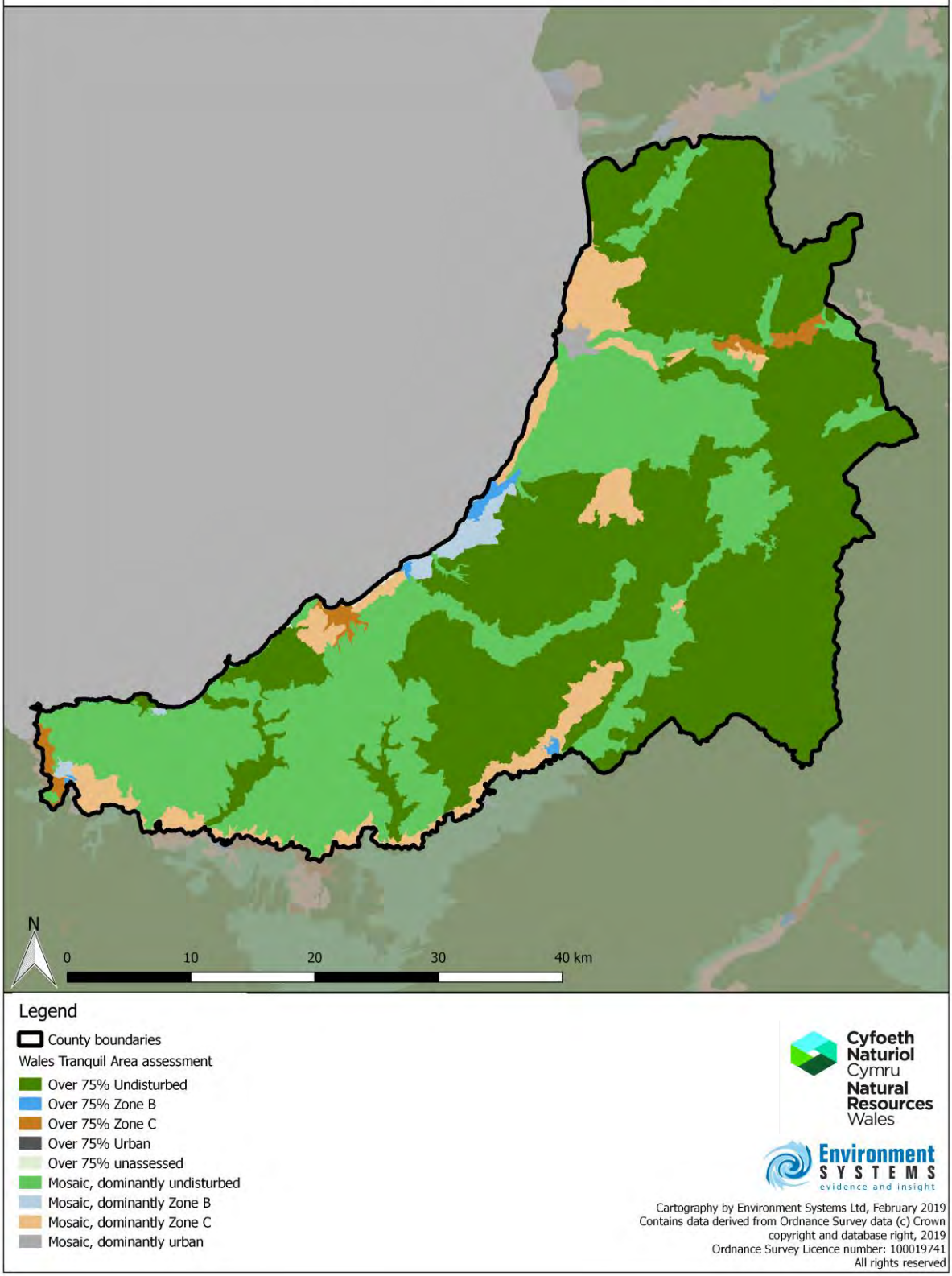
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: GL16D - Ceredigion

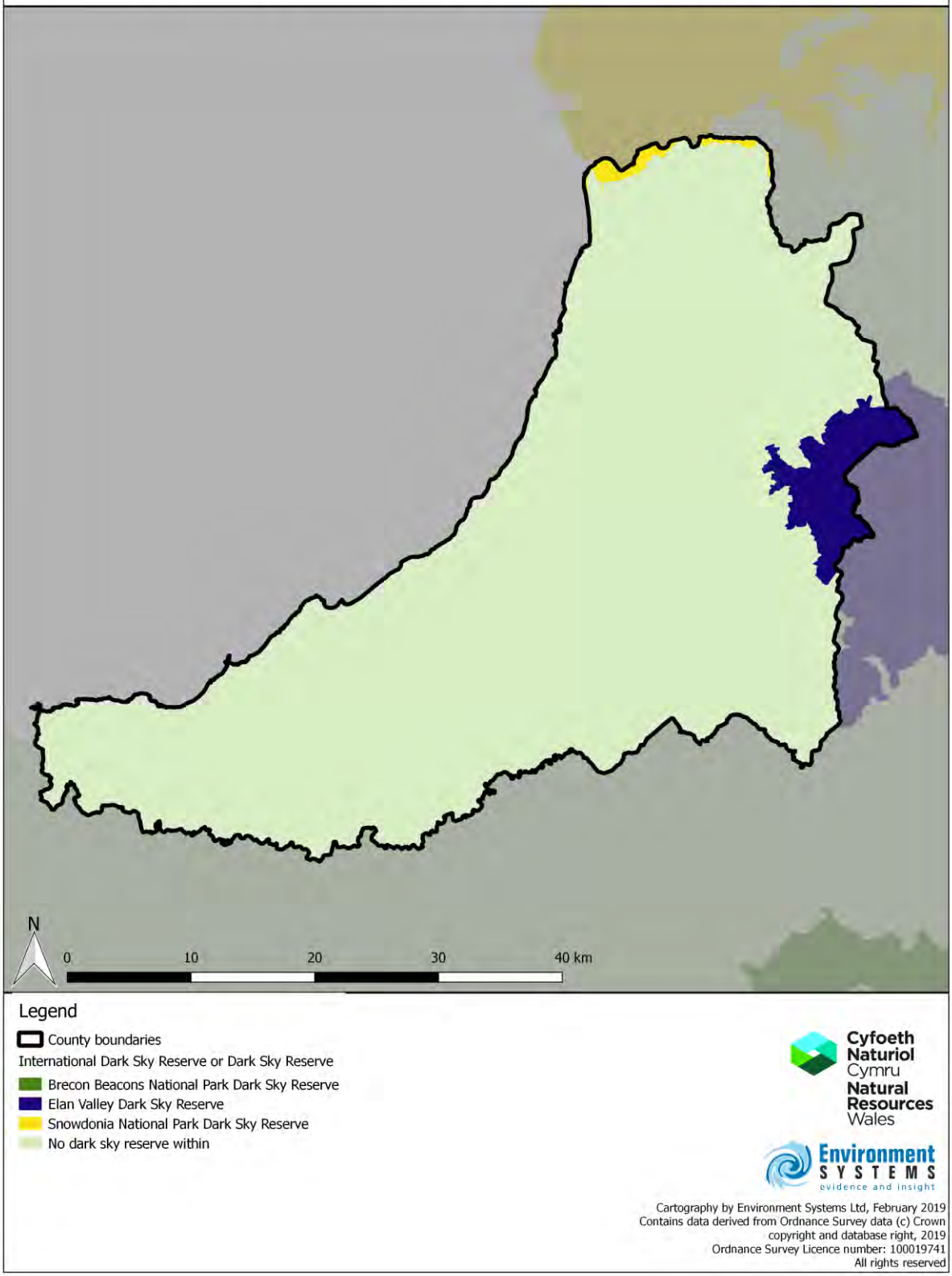


Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS4 - Ceredigion



LANDMAP Cultural Landscape Services: CLS8 - Ceredigion



Legend

- County boundaries

International Dark Sky Reserve or Dark Sky Reserve

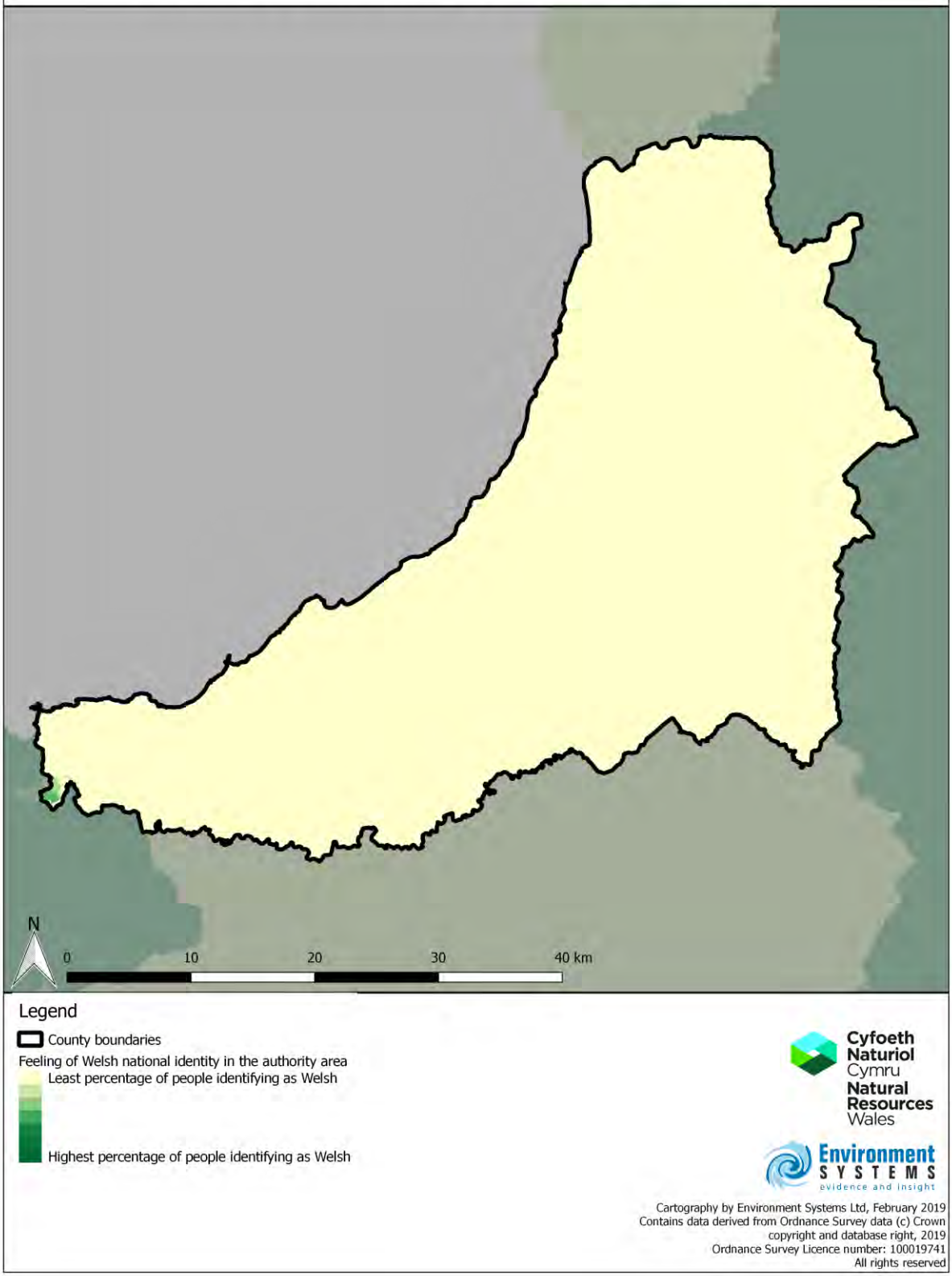
- Brecon Beacons National Park Dark Sky Reserve
- Elan Valley Dark Sky Reserve
- Snowdonia National Park Dark Sky Reserve
- No dark sky reserve within

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

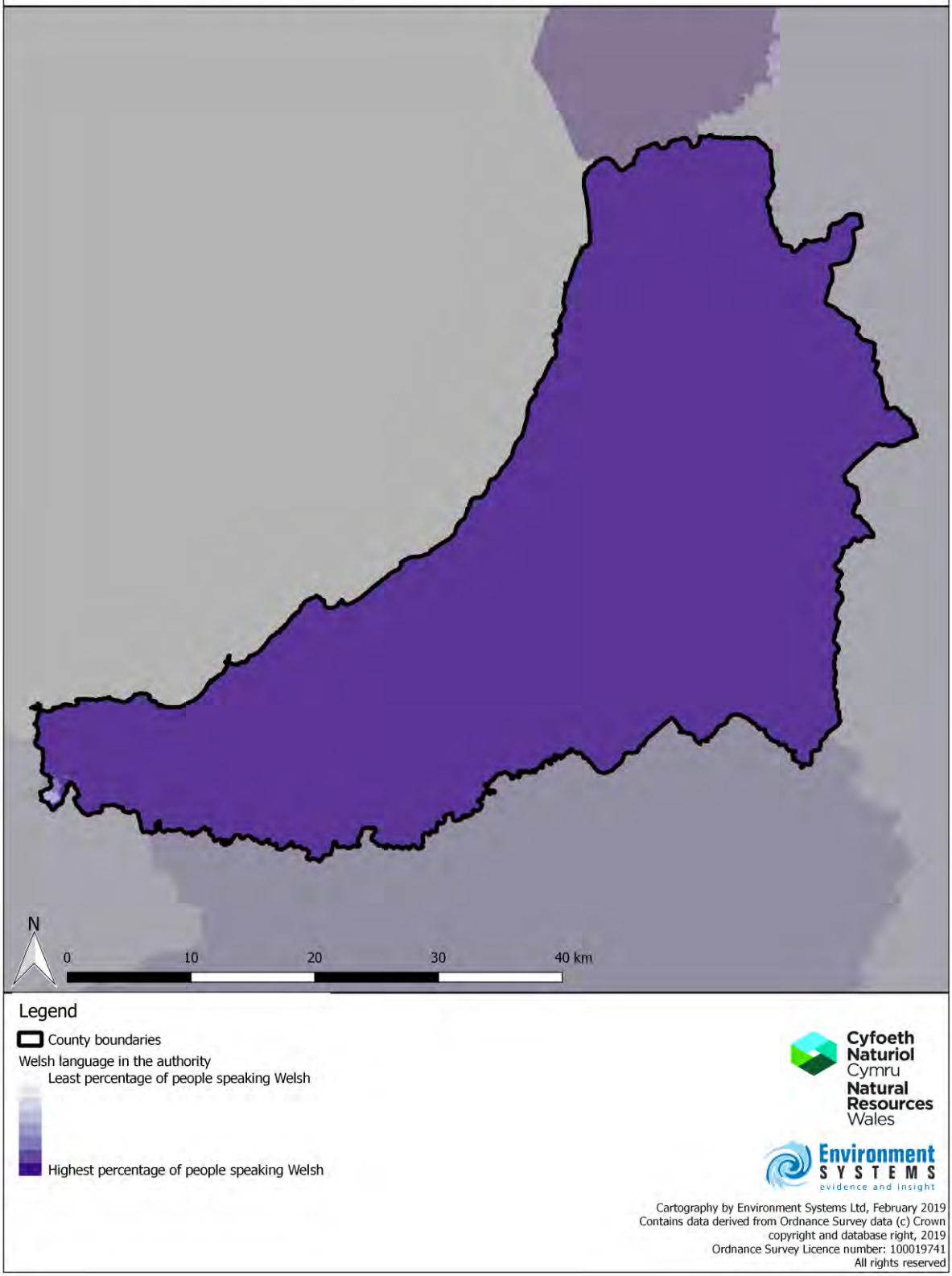
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS6 - Ceredigion



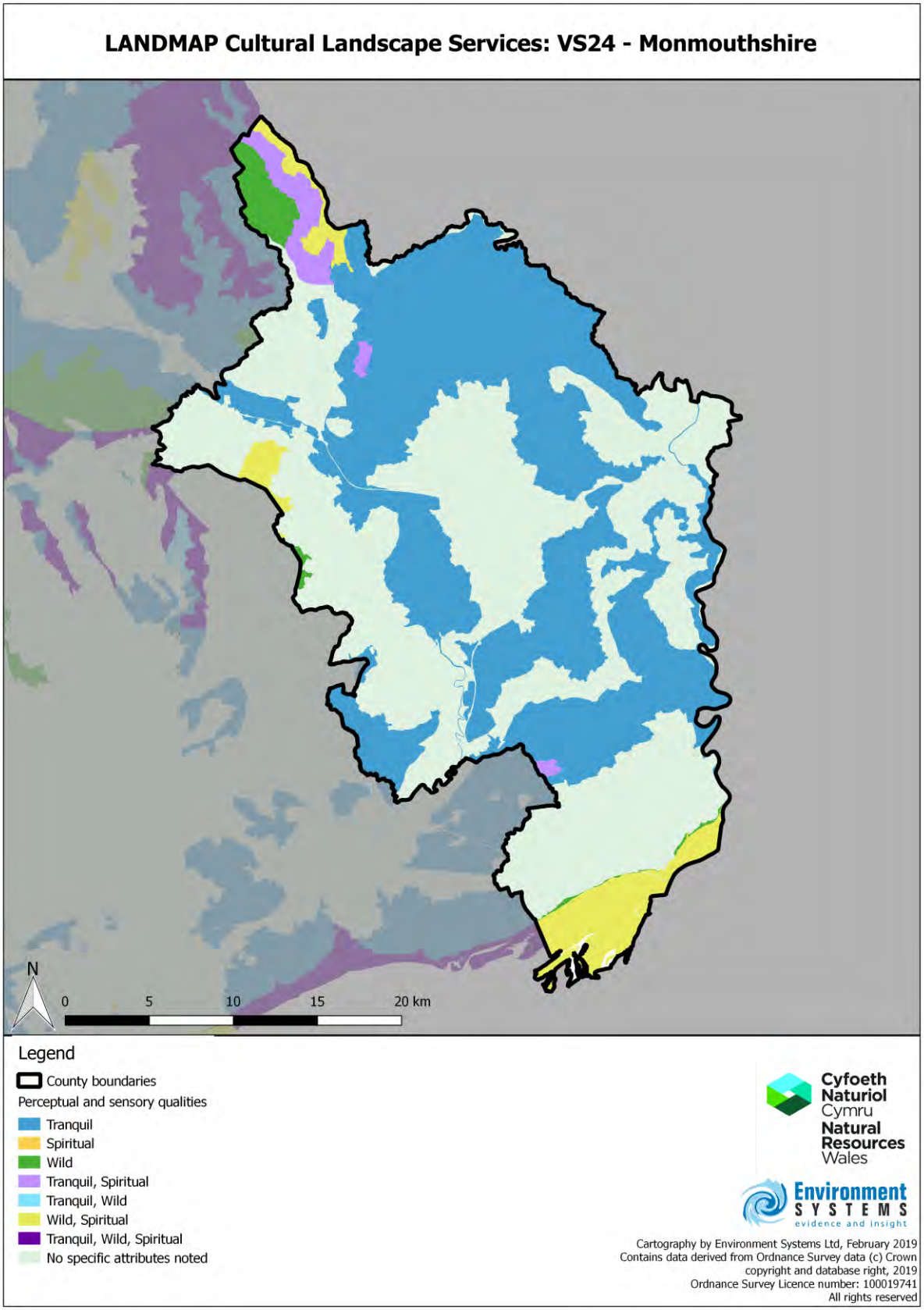
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS7 - Ceredigion

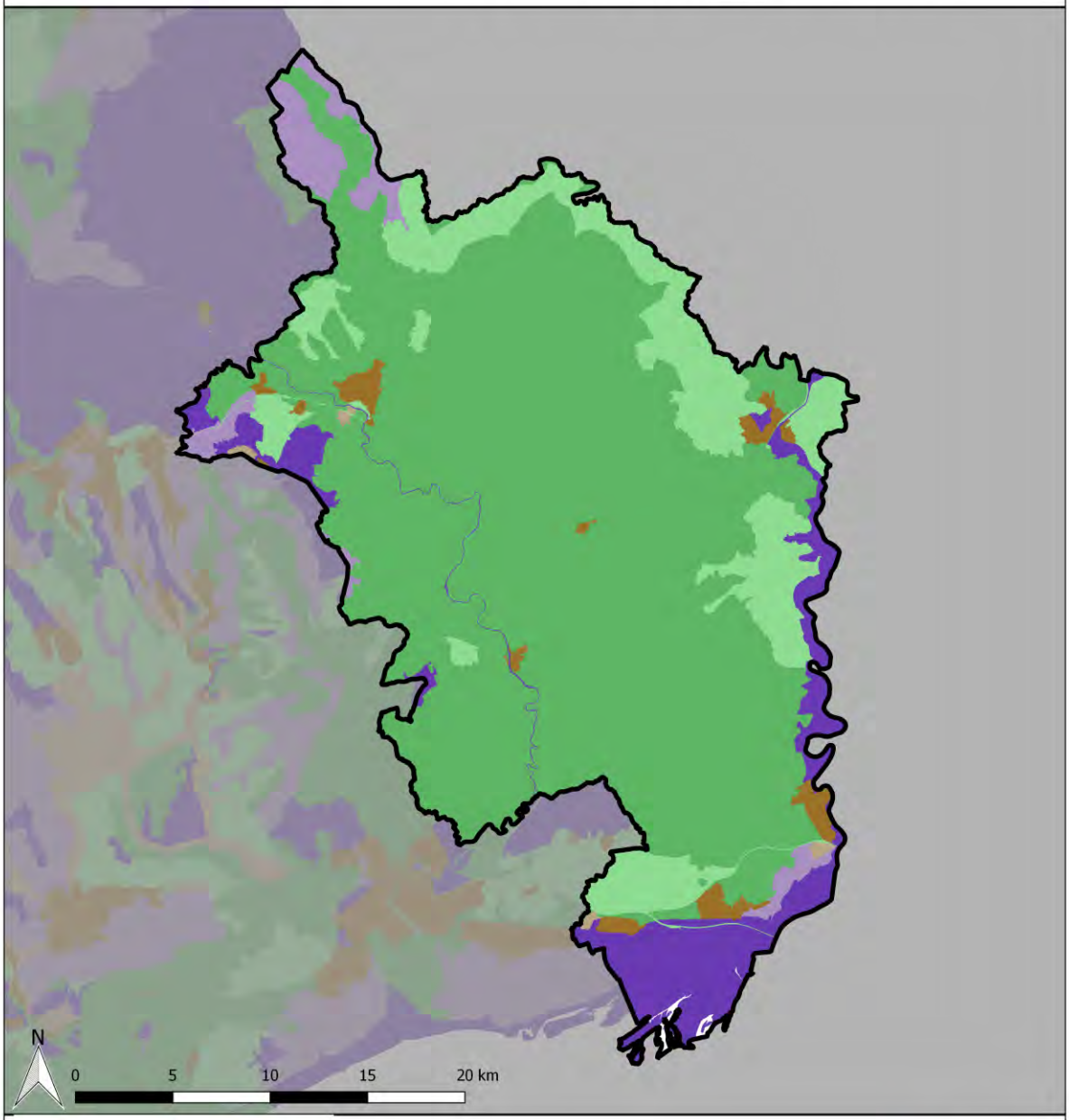


Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

7.4. Monmouthshire



LANDMAP Cultural Landscape Services: LH25D - Monmouthshire



Legend

- County boundaries

Landscape Habitats evaluation

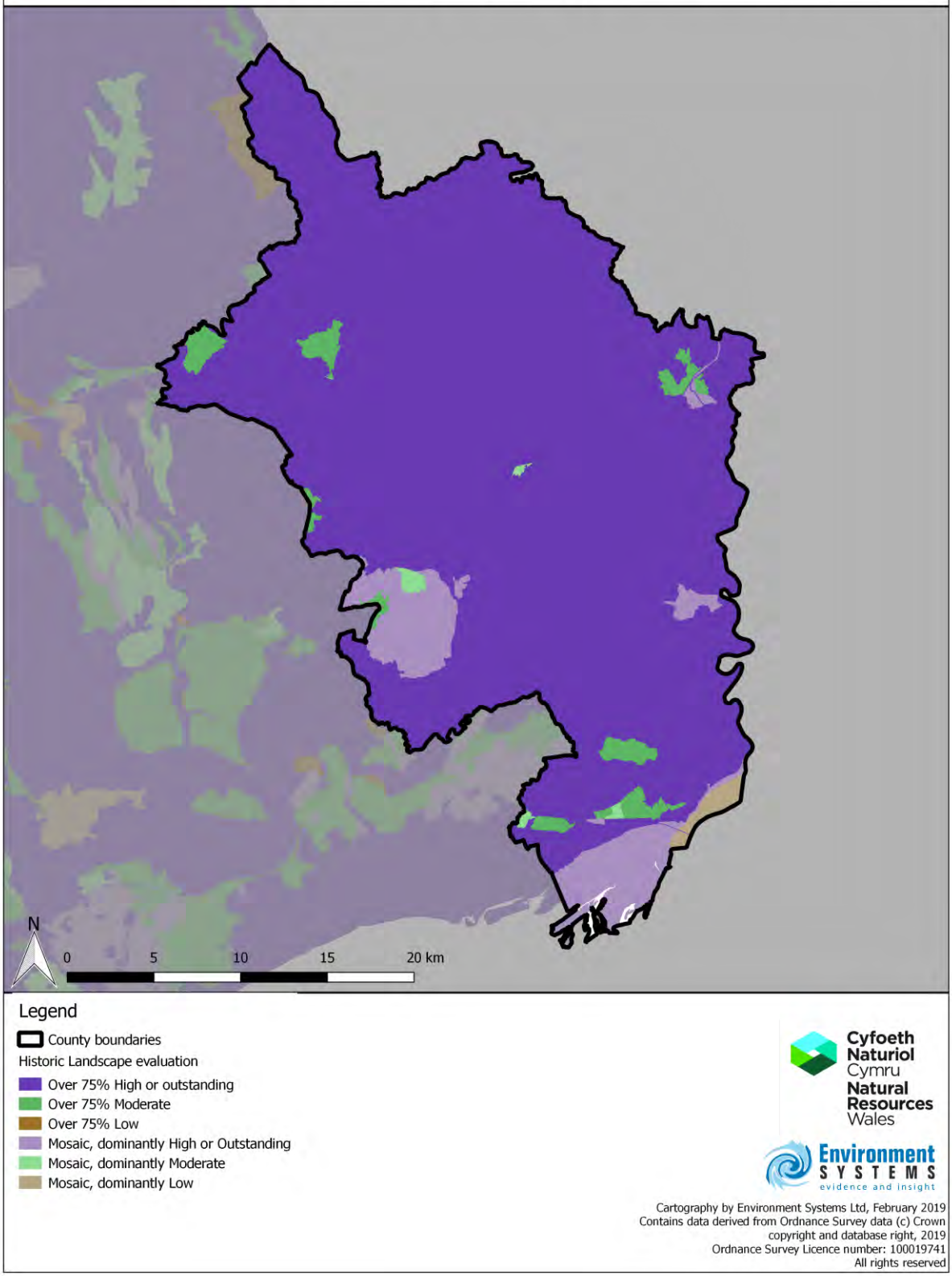
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

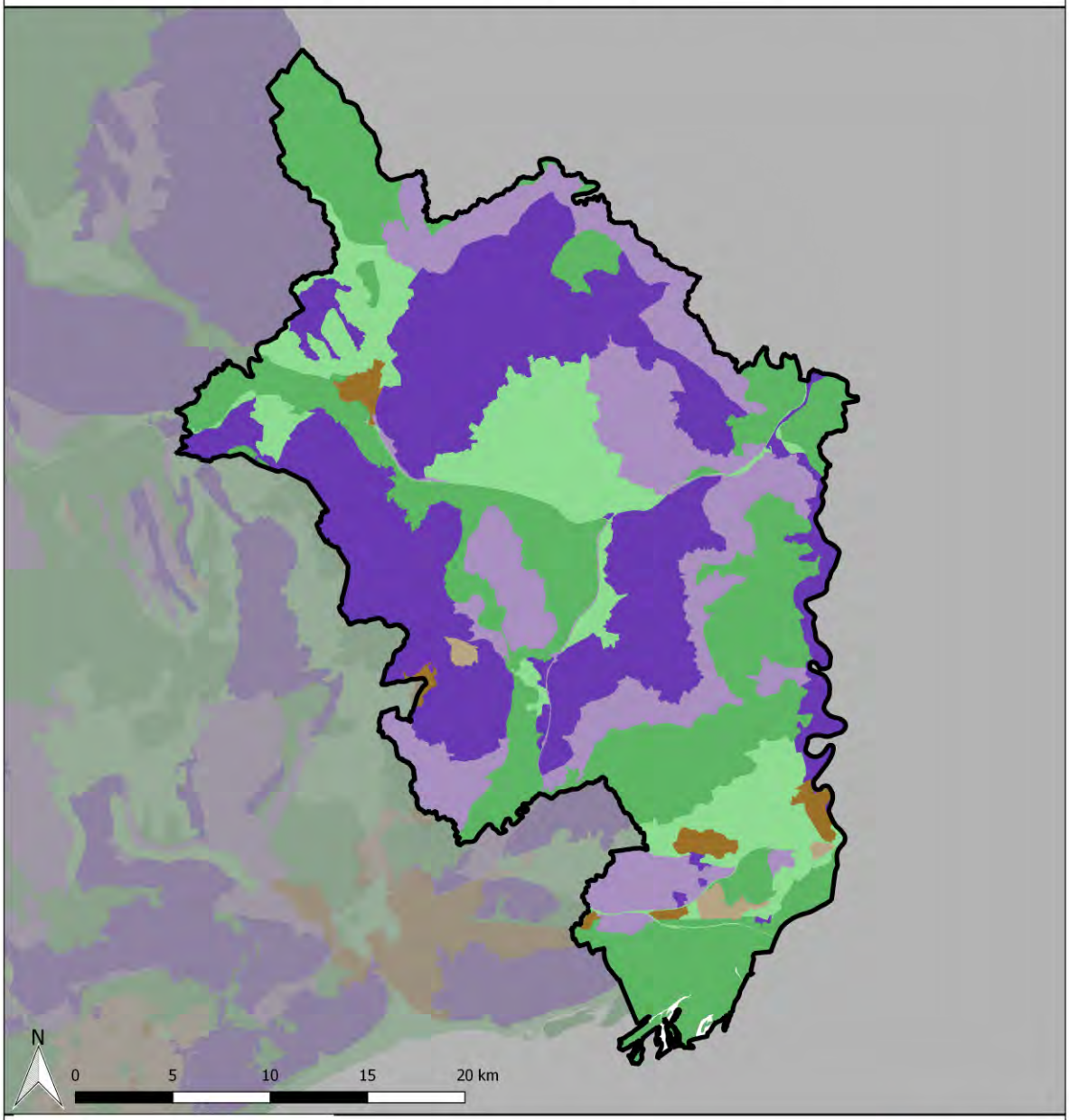
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: HL23D - Monmouthshire



Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: GL16D - Monmouthshire



Legend

- County boundaries

Geological Landscape evaluation

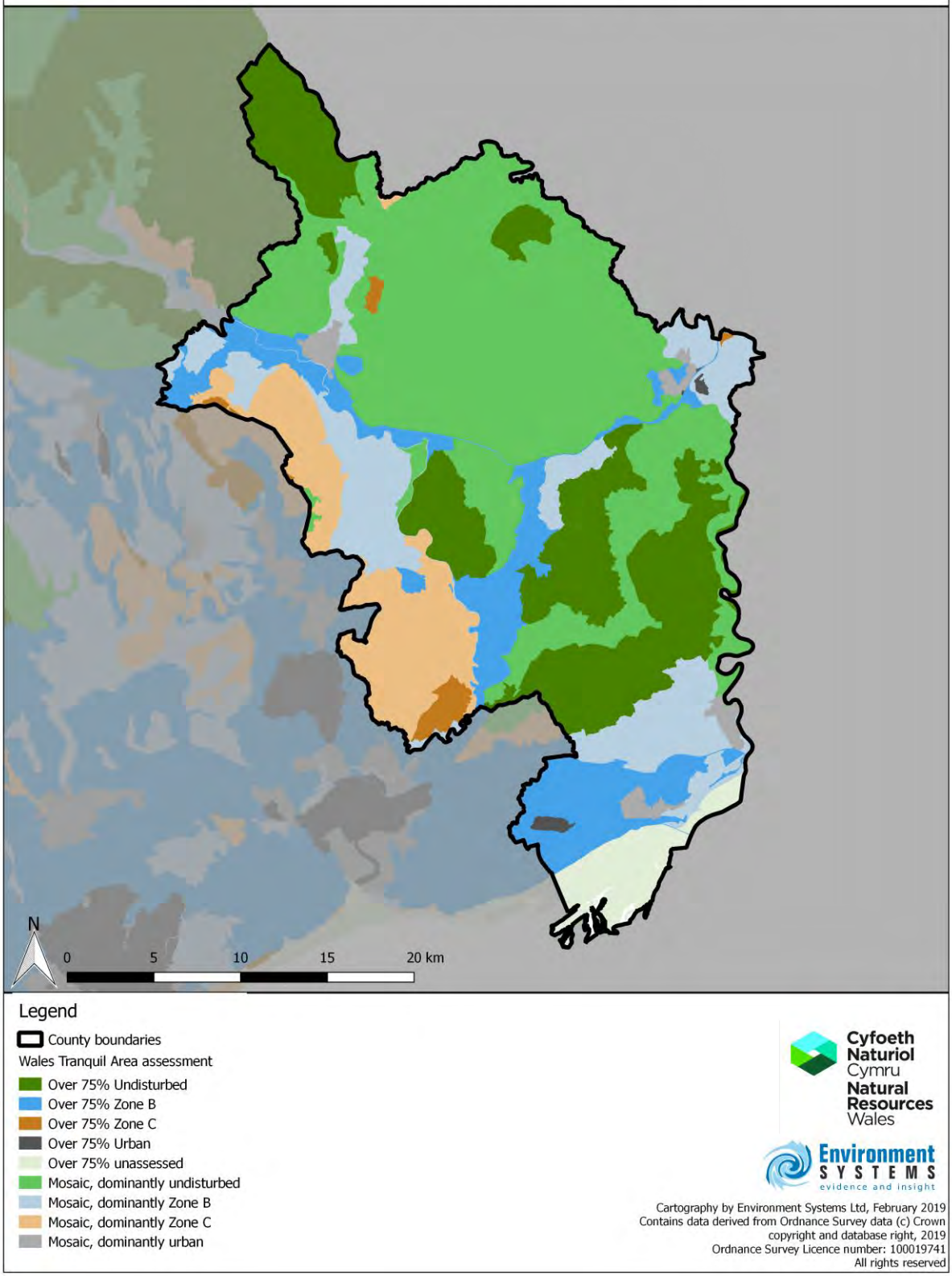
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

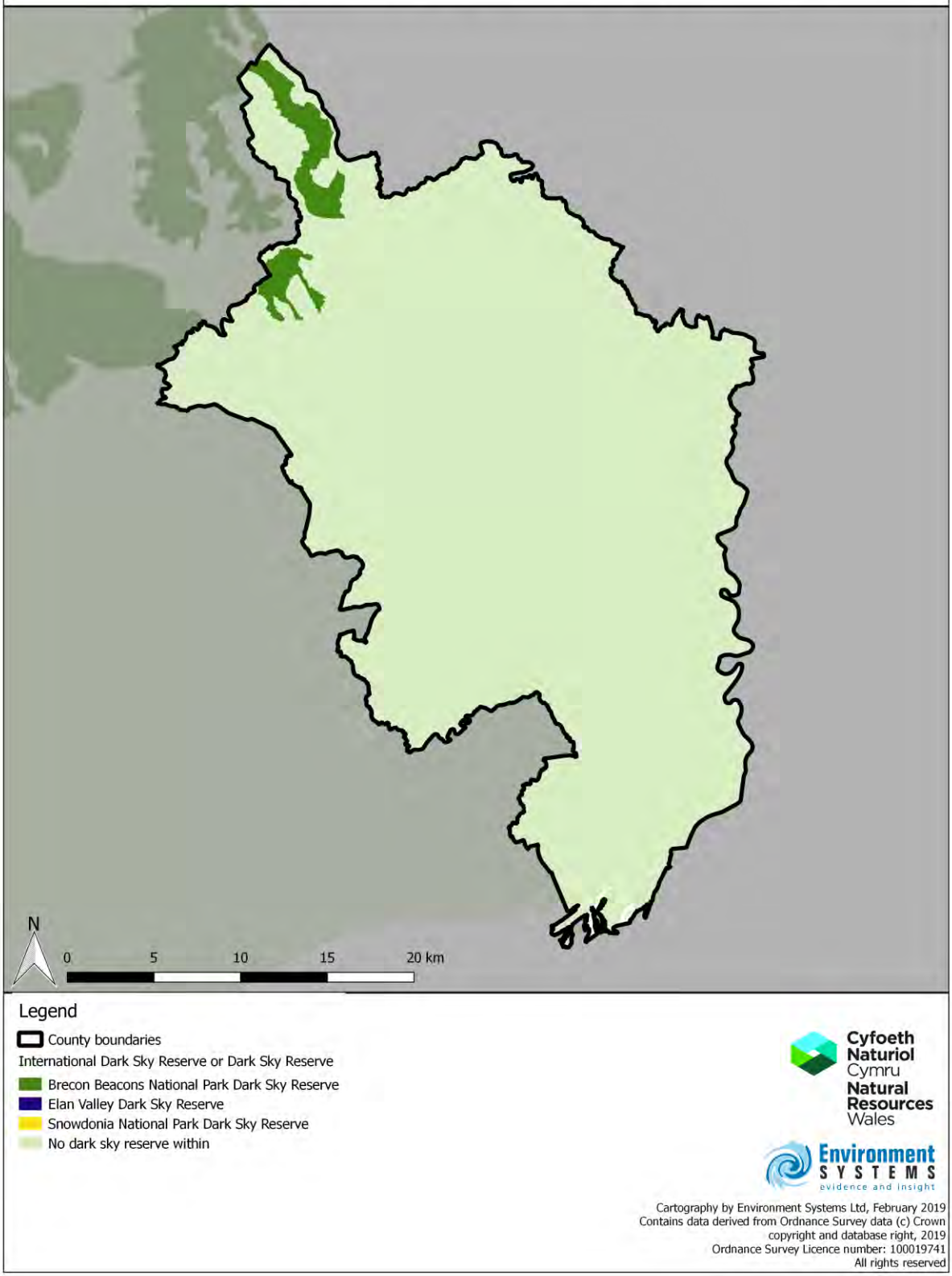
Environment SYSTEMS evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS4 - Monmouthshire

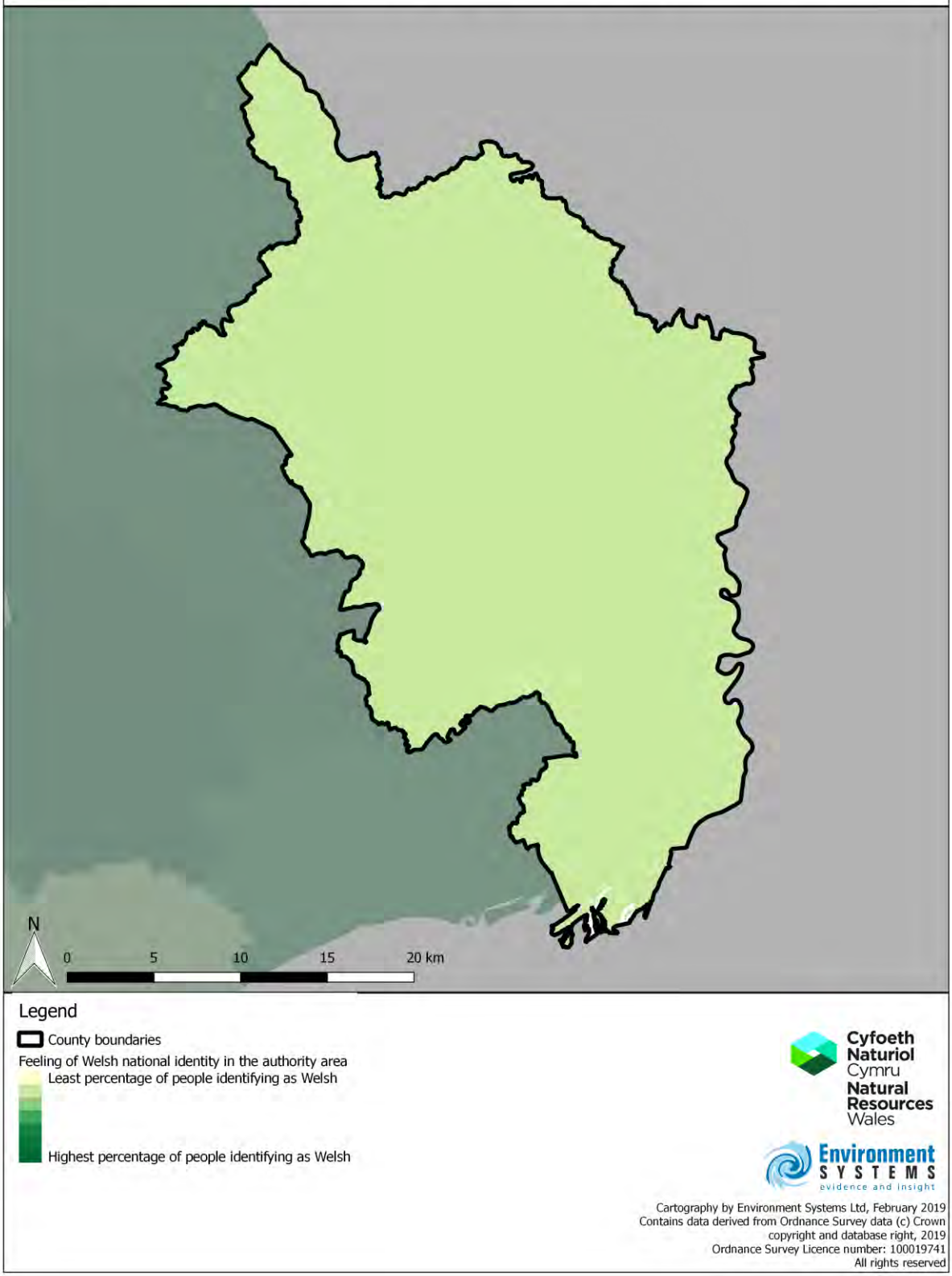


LANDMAP Cultural Landscape Services: CLS8 - Monmouthshire



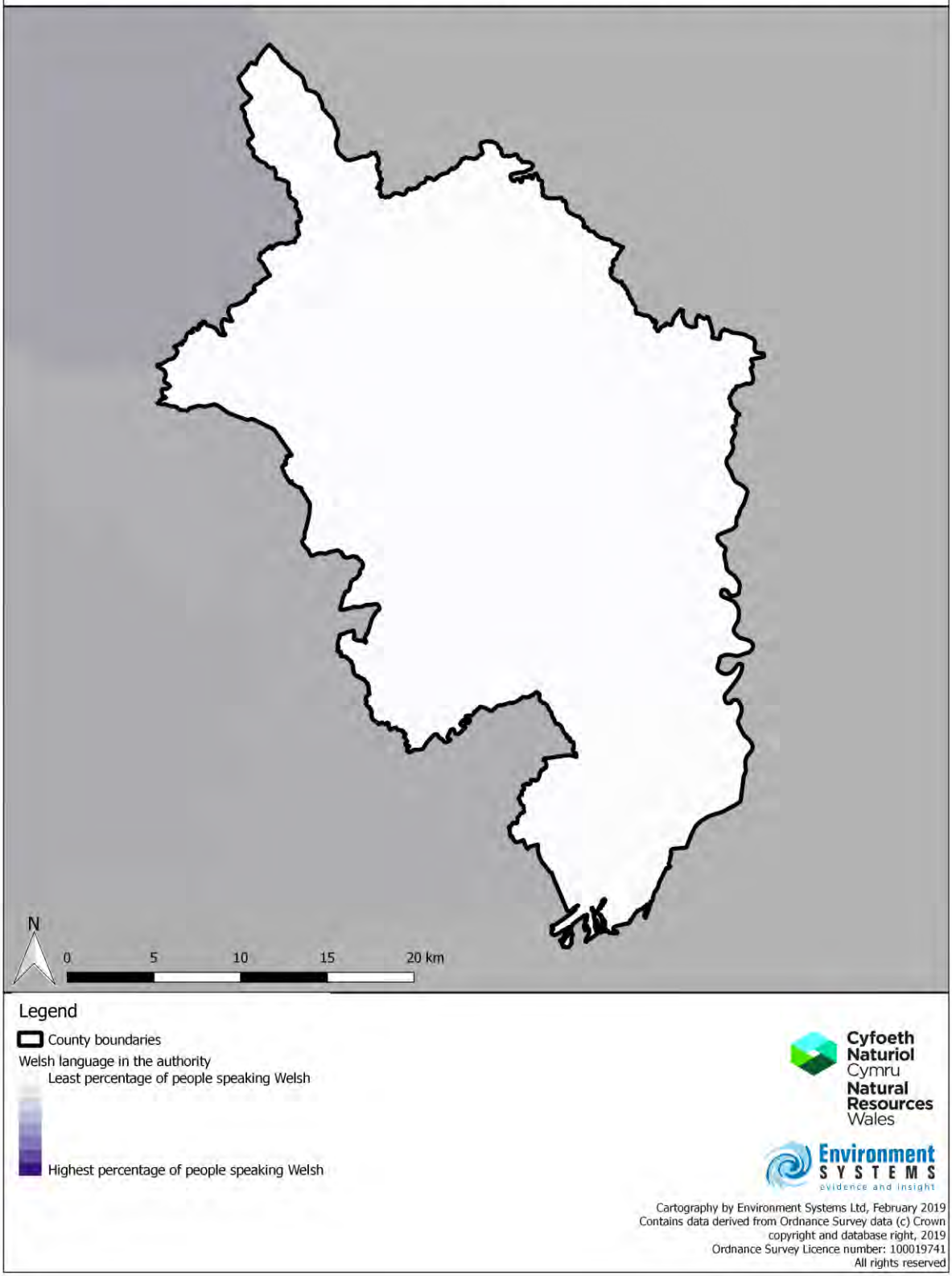
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS6 - Monmouthshire

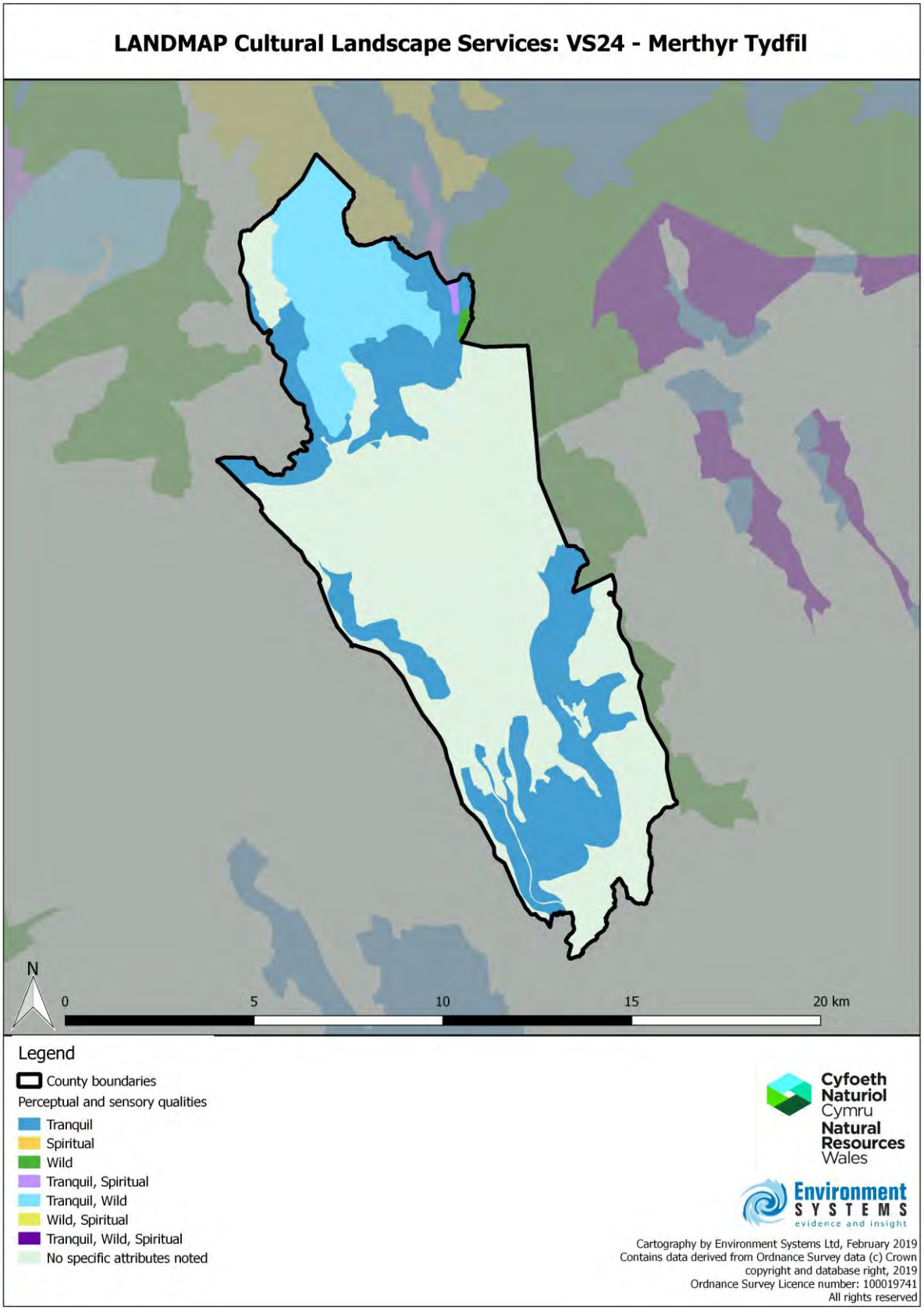


Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

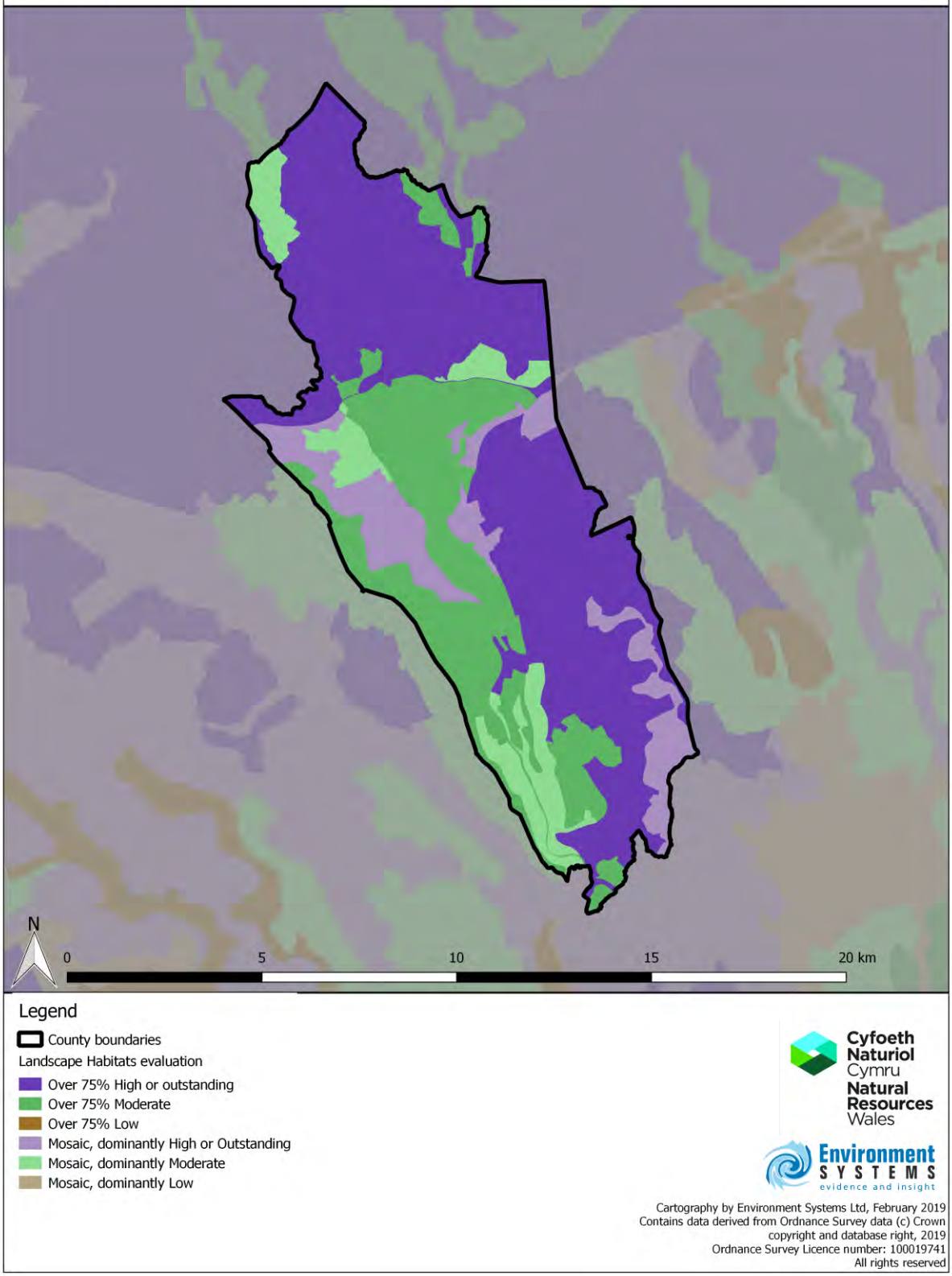
LANDMAP Cultural Landscape Services: CLS7 - Monmouthshire



7.5. Merthyr Tydfil



LANDMAP Cultural Landscape Services: LH25D - Merthyr Tydfil



Legend

- County boundaries

Landscape Habitats evaluation

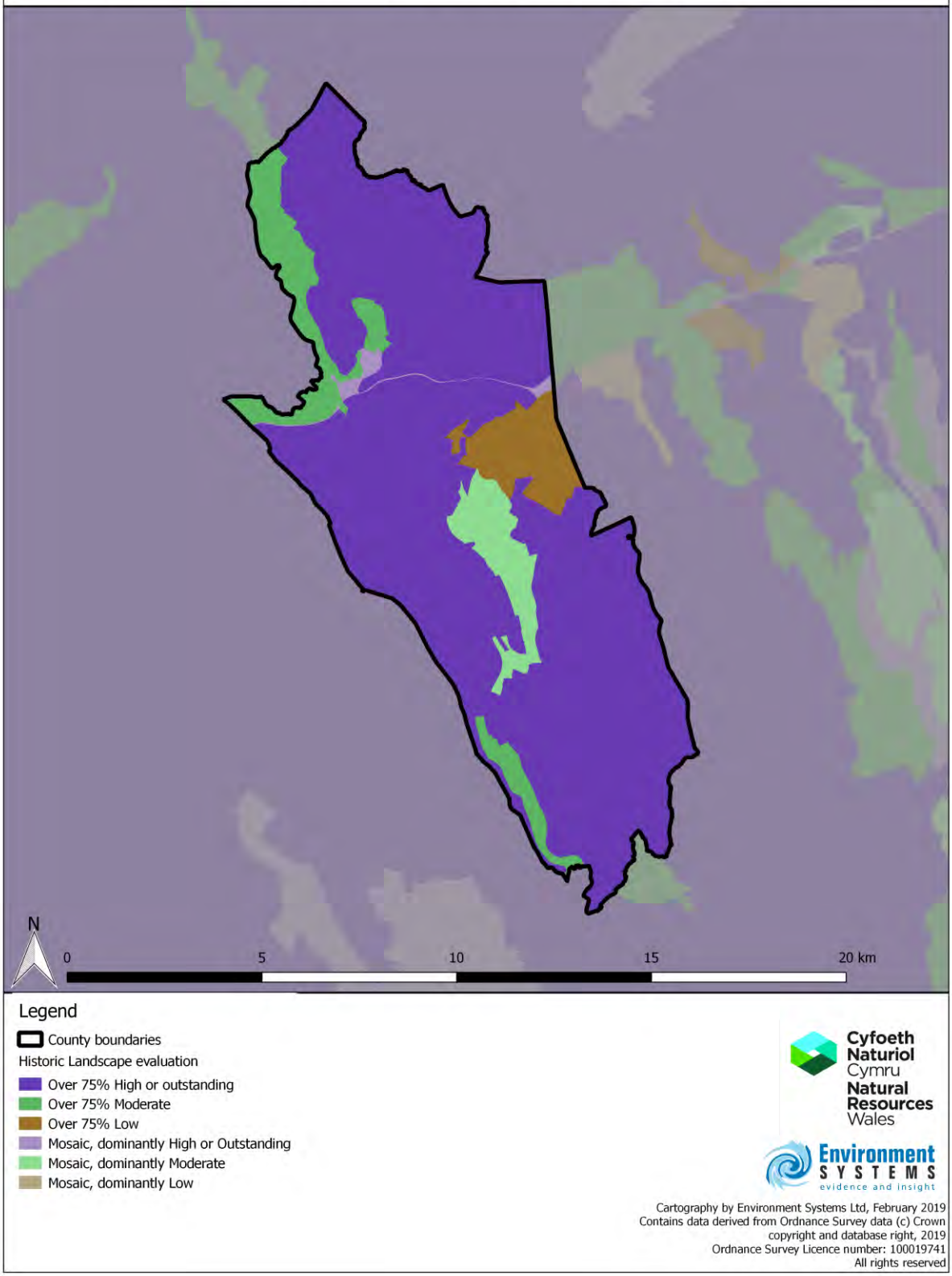
- Over 75% High or outstanding
- Over 75% Moderate
- Over 75% Low
- Mosaic, dominantly High or Outstanding
- Mosaic, dominantly Moderate
- Mosaic, dominantly Low

Cyfoeth Naturiol Cymru Natural Resources Wales

Environment SYSTEMS evidence and insight

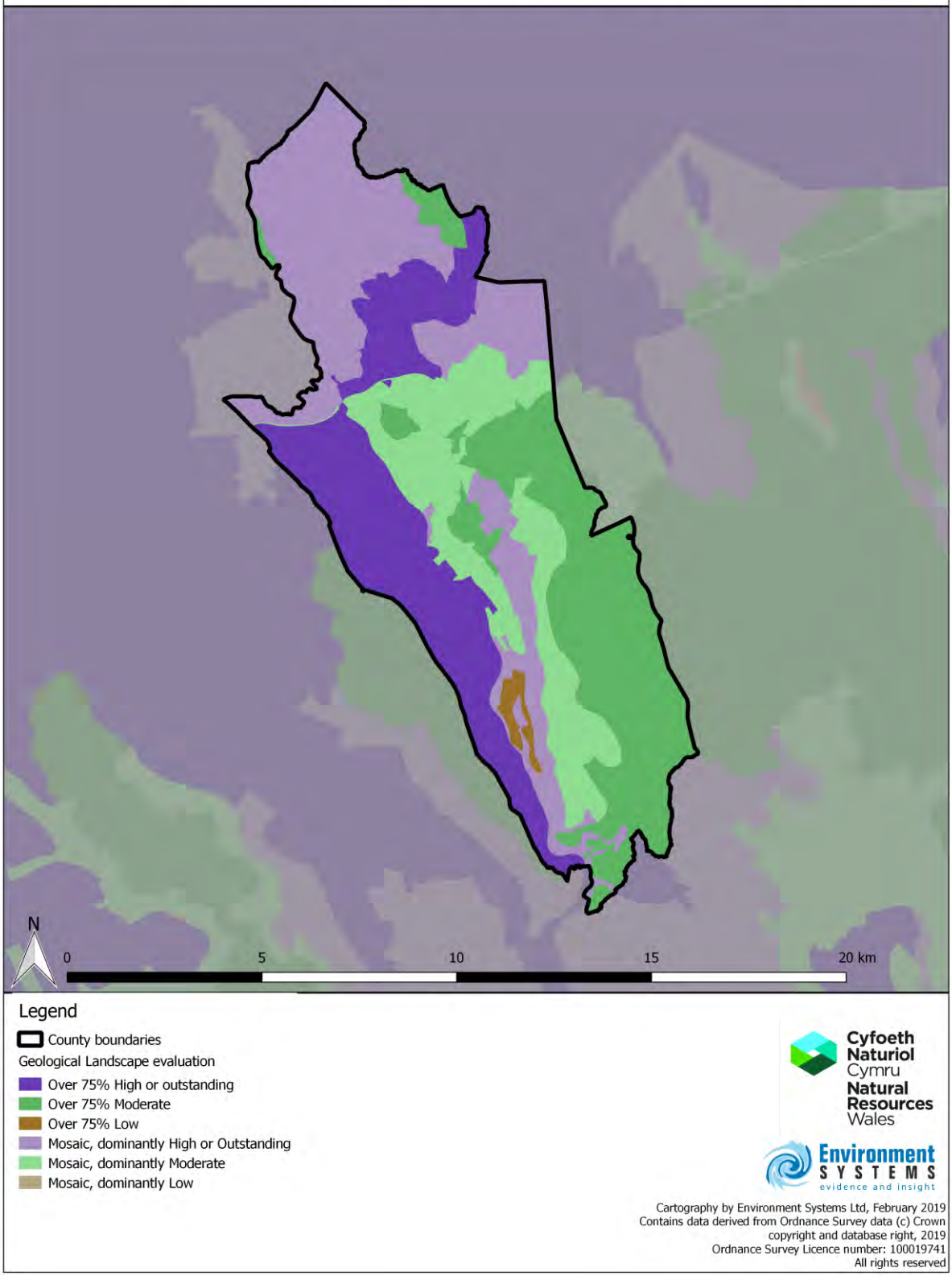
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: HL23D - Merthyr Tydfil



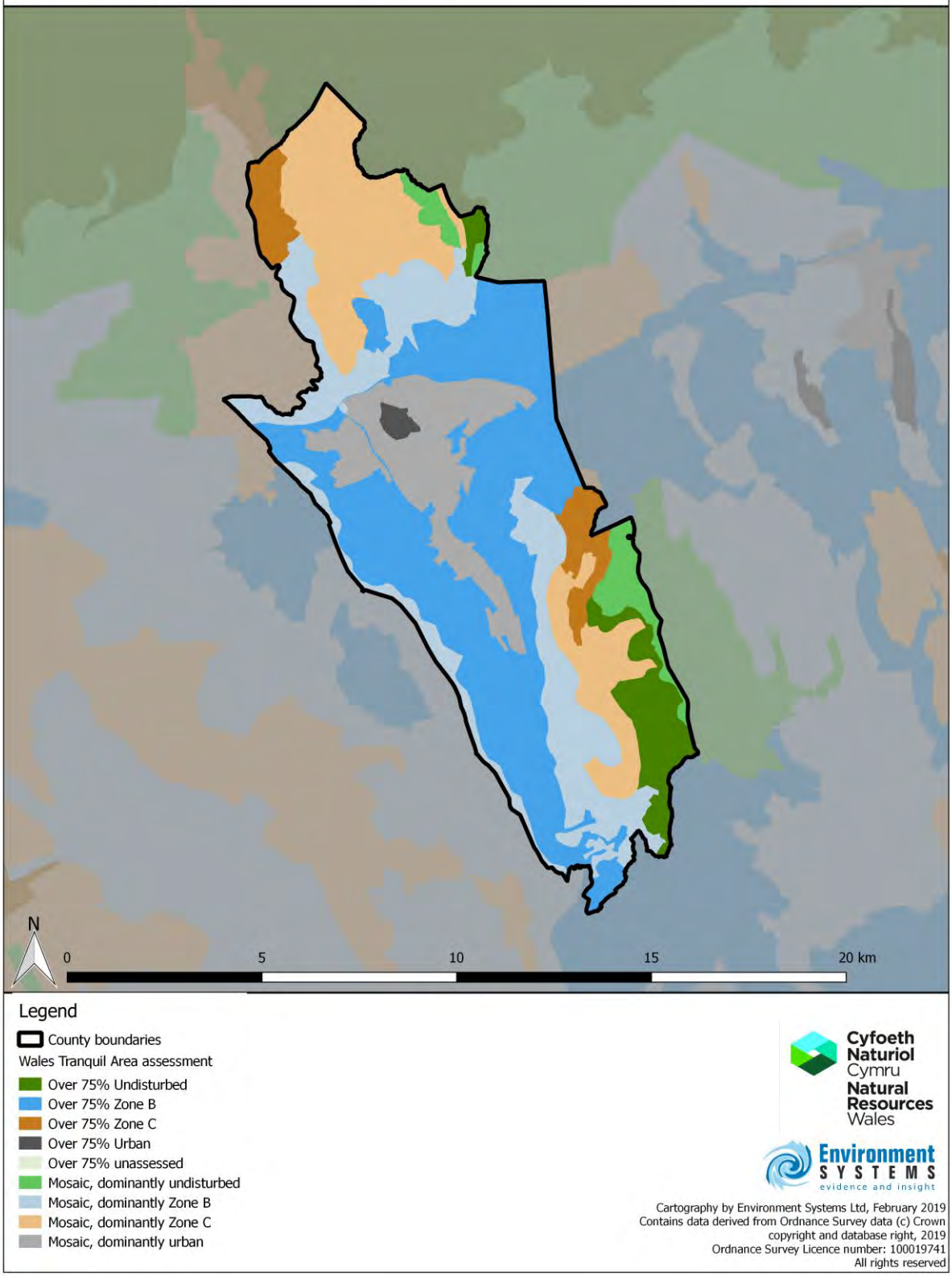
Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: GL16D - Merthyr Tydfil

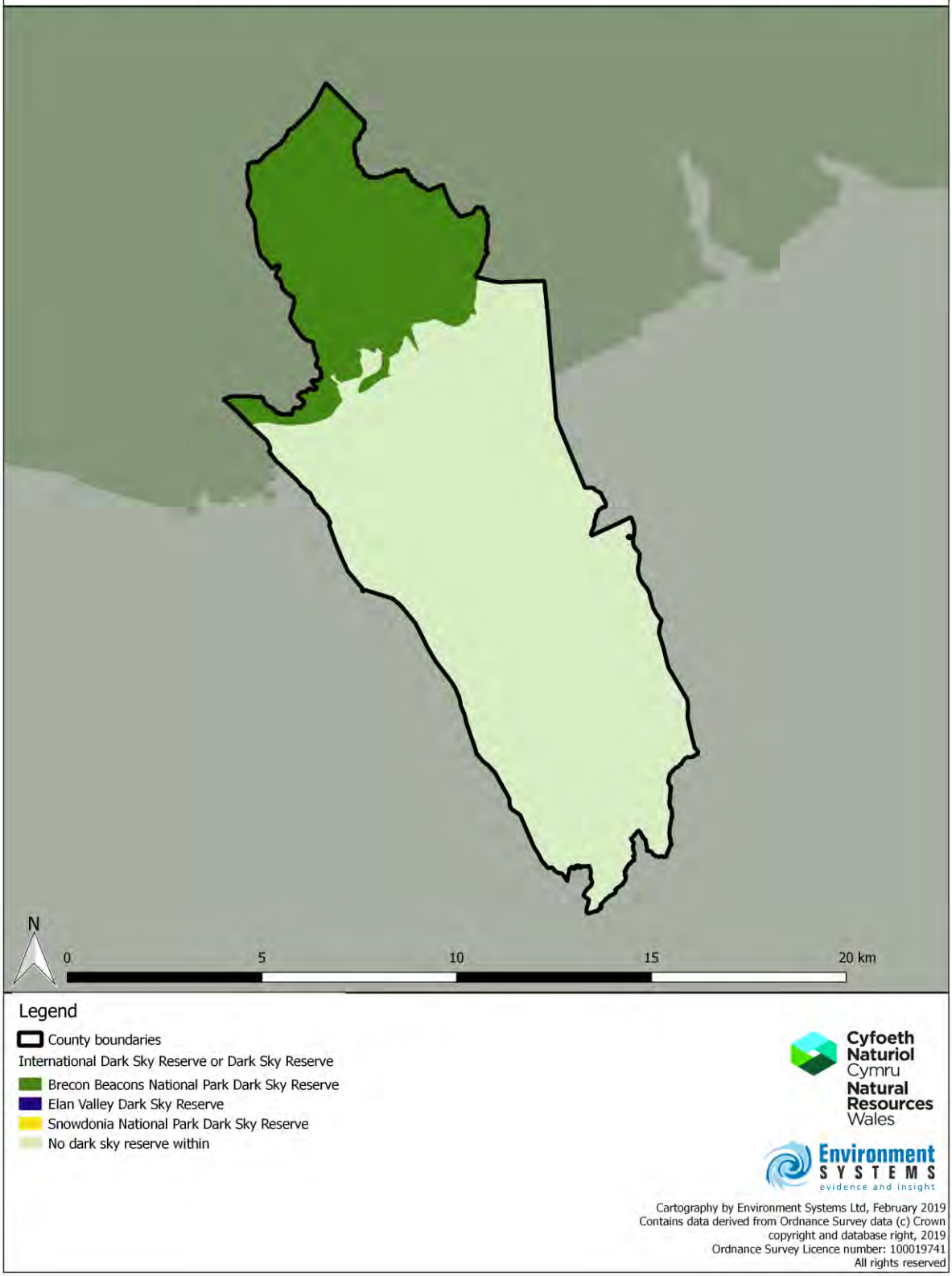


Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS4 - Merthyr Tydfil

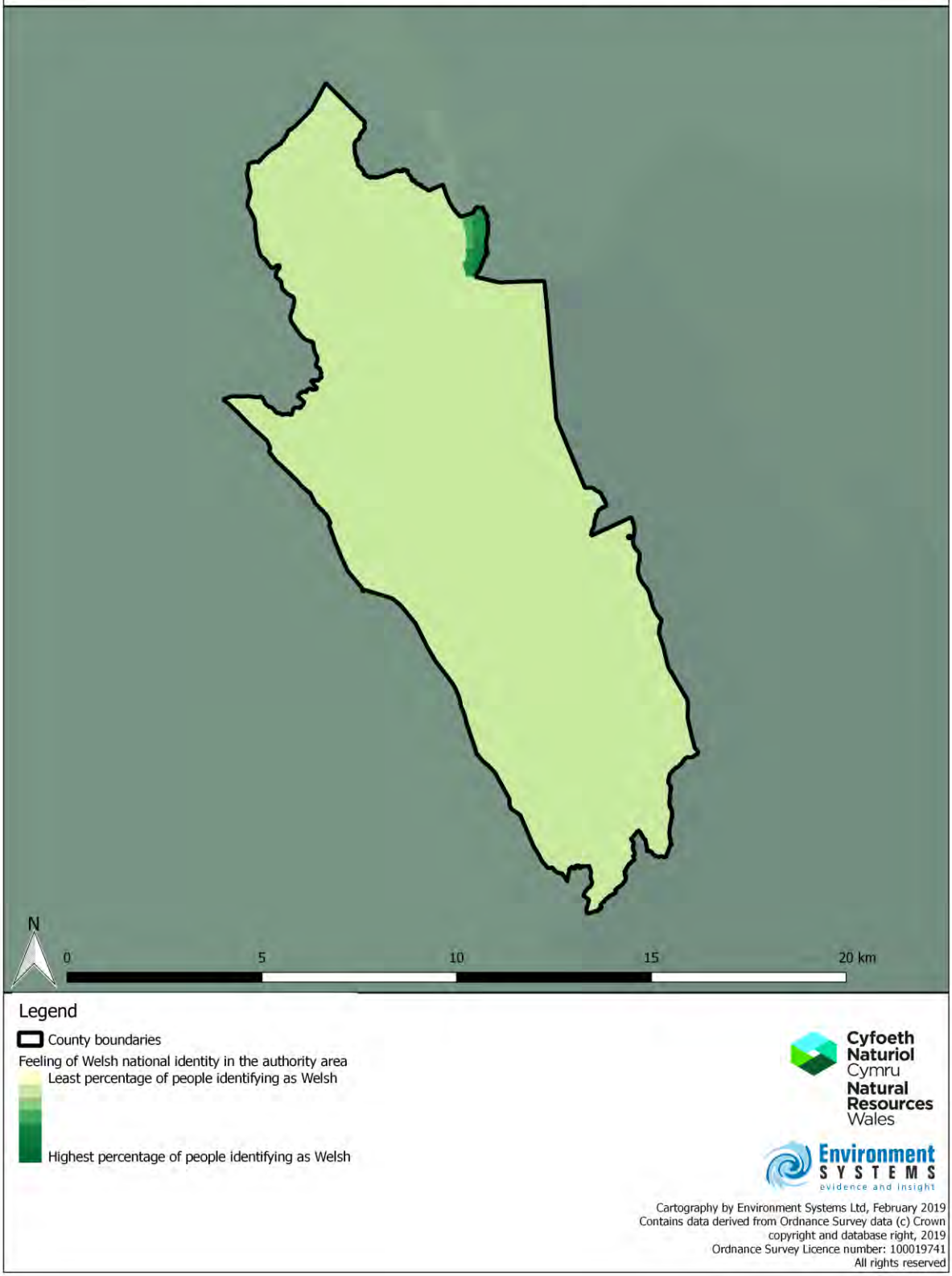


LANDMAP Cultural Landscape Services: CLS8 - Merthyr Tydfil



Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS6 - Merthyr Tydfil



Legend

County boundaries

Feeling of Welsh national identity in the authority area

Least percentage of people identifying as Welsh

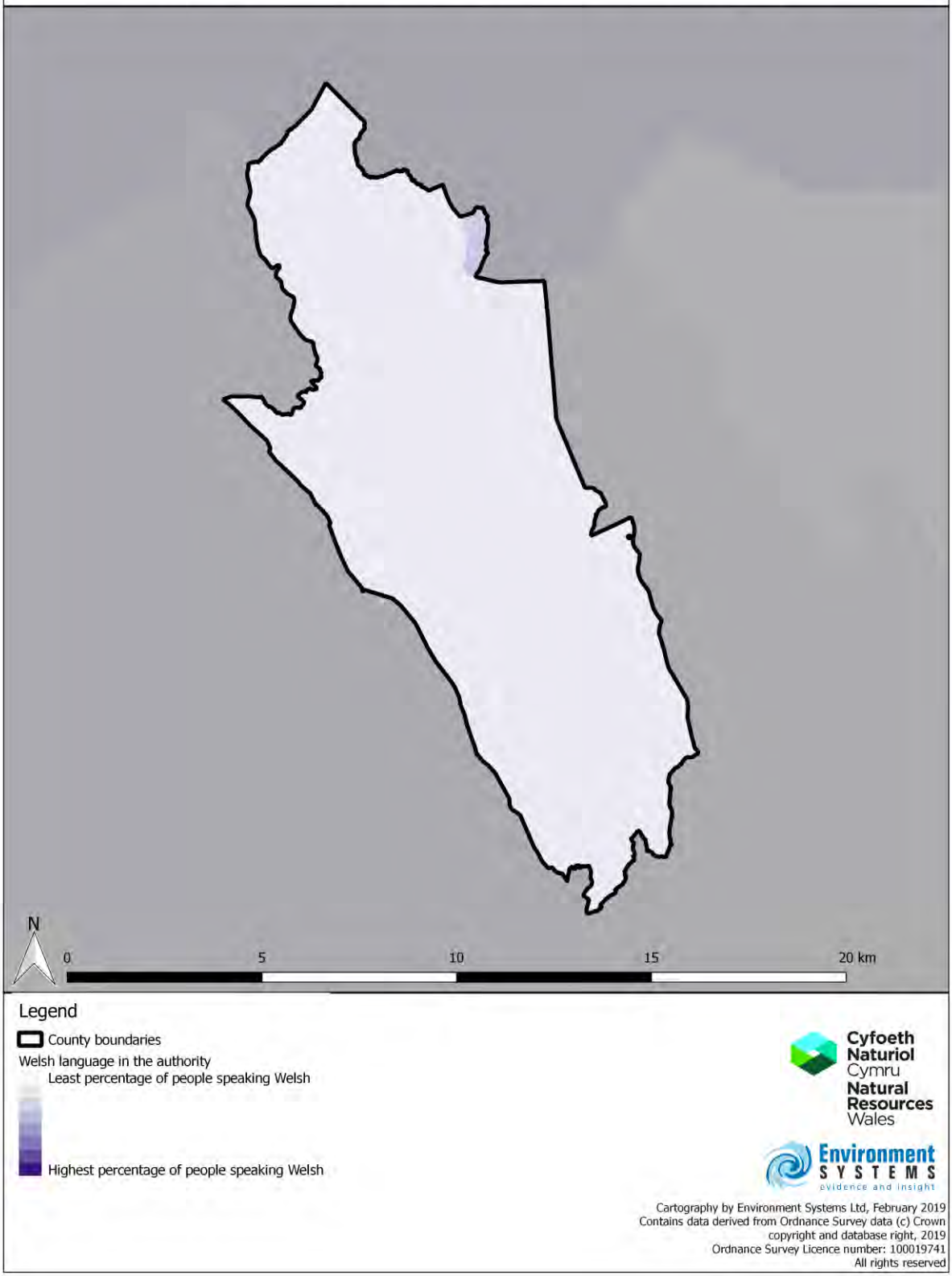
Highest percentage of people identifying as Welsh

Cyfoeth Naturiol Cymru
Natural Resources Wales

Environment SYSTEMS
evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

LANDMAP Cultural Landscape Services: CLS7 - Merthyr Tydfil



Legend

County boundaries

Welsh language in the authority

Least percentage of people speaking Welsh

Highest percentage of people speaking Welsh

Cyfoeth Naturiol Cymru
Natural Resources Wales

Environment SYSTEMS
evidence and insight

Cartography by Environment Systems Ltd, February 2019
Contains data derived from Ordnance Survey data (c) Crown copyright and database right, 2019
Ordnance Survey Licence number: 100019741
All rights reserved

Published by:
Natural Resources Wales
Address line one
Address line two
Address line three
Post Code

0000 000 000

© Natural Resources Wales [2019]

All rights reserved. This document may be reproduced with prior permission of Natural Resources Wales

Further copies of this report are available from:

Email: library@cyfoethnaturiolcymru.gov.uk