



1	Crynodeb	1
2	Summary	1
3	LANDMAP	2
4	LANDMAP map browser.....	2
5	Downloading LANDMAP data.....	9
6	Contact	12

1 Crynodeb

Mae'r nodyn cyfarwyddyd yn rhoi gwybodaeth am sut i gael gafael ar borwr map ar-lein LANDMAP a llwytho i lawr pump set data LANDMAP. Yn gwyno:

Edrych ar ddata LANDMAP drwy'r porwr map (tudalen 2)

Y porwr map rhyngweithiol yw'r unig ffynhonnell o wybodaeth LANDMAP (mapiau ac arolygon) ar gyfer defnyddwyr allanol heb SGDd (GIS) ac sy'n adnodd cyflym ar gyfer holl ddefnyddwyr gan gynnwys staff CNC. Byddwch yn gallu gweld mapiau a data LANDMAP, gwneud ymholiadau syml ac edrych ar fapiau thematig. Mae'r porwr mapiau ar-lein ar gael yn <https://landmap-maps.naturalresources.wales/default.aspx>

Llwytho data LANDMAP i lawr (tudalen 9)

Mae data LANDMAP ar gael i'w lwytho i lawr drwy Wasanaeth Nodwedd Gwe (WFS), gan ddarparu cysylltiad uniongyrchol, darllen yn unig i'r gronfa data daearyddol LANDMAP.

Gellid lawr lwytho data LANDMAP o Borth Daear Lle, hyb ar gyfer data a gwybodaeth am yr amgylchedd. Unwaith mae data LANDMAP wedi cael ei lawr lwytho, fedrwyd agor, gweld a dadansoddi'r data yn eich amgylchedd SGDd (GIS), gan alluogi defnydd llawn o'r ymarferoldeb SGDd a throshaenu data LANDMAP gyda chronfeydd data gofodol eraill. <http://lle.gov.wales/Catalogue?text=landmap&lang=cy>

2 Summary

This guidance note provides information on how to access the online LANDMAP map browser and download the five LANDMAP spatial datasets. In summary:

Viewing LANDMAP data via the map browser (page 2)

The LANDMAP interactive map browser is the sole source of LANDMAP information (maps and surveys) for external users without GIS and a quick access resource for all users including NRW staff. You will be able to view the LANDMAP maps and data, perform simple

queries and view thematic maps. The online map browser can be accessed from <https://landmap-maps.naturalresources.wales/>

Downloading LANDMAP data (page 9)

LANDMAP data is now available through a Web Feature Service (WFS), providing a direct, read-only, connection to the LANDMAP geodatabase.

LANDMAP data is available to download from the Lle Geo-Portal, a hub for environmental data and information. Once LANDMAP data is downloaded, you can open, view and interrogate the data in your own Geographical Information System (GIS) environment, enabling full use of the GIS functionality and overlaying LANDMAP data with other spatial datasets. <http://lle.wales.gov.uk/Catalogue?lang=en&text=landmap>

3 LANDMAP

LANDMAP is a whole landscape approach that covers all landscapes, designated and non-designated, it covers the natural, rural, peri-urban and urban areas, it includes inland waters and coastal areas to the low water mark. LANDMAP is an all-Wales GIS (Geographical Information System) based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. In Wales, LANDMAP is the formally adopted methodology for landscape assessment and is advocated by Planning Policy Wales.

LANDMAP is comprised of five spatial datasets of information known as the Geological Landscape, Landscape Habitats, Visual & Sensory, Historic Landscape and Cultural Landscape. LANDMAP Information is collected in a structured and rigorous way that is defined by the LANDMAP methodology. A GIS map shows the aspect areas and a survey record for each aspect area identified contains the descriptive landscape information; these records are linked to the GIS map.

Complete, quality assured, all Wales coverage of all five layers was completed in 2012, thereby providing a nationally consistent resource for landscape planning and decision making.

Visit the LANDMAP homepage for further information at

<https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/landmap-the-welsh-landscape-baseline/?lang=en>

4 LANDMAP map browser

Viewing LANDMAP data via the map browser

The LANDMAP interactive map browser is the sole source of LANDMAP information (maps and surveys) for external users without GIS and a quick access resource for all users including NRW staff. You will be able to view the LANDMAP maps and data, perform simple queries and view thematic maps. The online map browser can be accessed from <https://landmap-maps.naturalresources.wales/>

Map Search

On the first map page at <https://landmap-maps.naturalresources.wales/> you will be asked to narrow down what you want to look at.

Step 1

- Select the LANDMAP dataset (aspect) you're interested in e.g. Historic Landscape or Visual & Sensory.
- You can choose to look at all the layers at the same time by selecting the "all aspects" option.

Step 2

- **Locate the area** you are interested in by completing **one** of the search fields and clicking the find button e.g. settlement name, postcode, unitary authority
- You can simply select an area by clicking on the map (Pembrokeshire and Pembrokeshire Coast National Park are treated as a single dataset, Powys is divided into three datasets (Radnorshire, Montgomeryshire and Brecknockshire), Brecon Beacons National Park is found within the unitary authorities it resides within)

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INTERACTIVE MAPS - LANDMAP

Map Search

STEP 1 : Select a LANDMAP aspect
LANDMAP aspect
All Aspects

Step 2: Locate the area of interest
Settlement
Postcode
Unitary Authority
National Park
OS Grid Ref

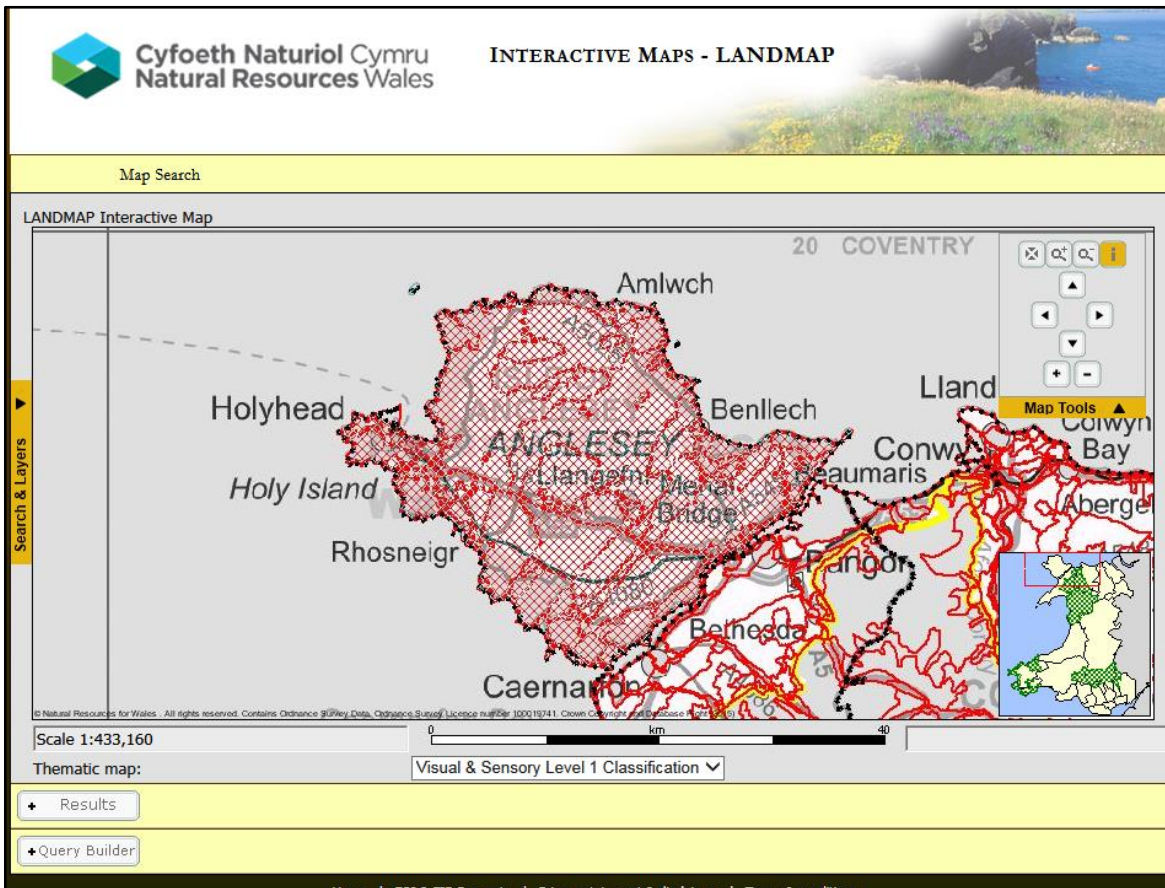
1:10,000 Find

Choose an area on the map, or use one of the search options above to locate an area of interest

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- **Map Page**

The map page is where you can view and query the data, in this example the Visual & Sensory layer has been selected (shown by red hatched area) for Ynys Mon.



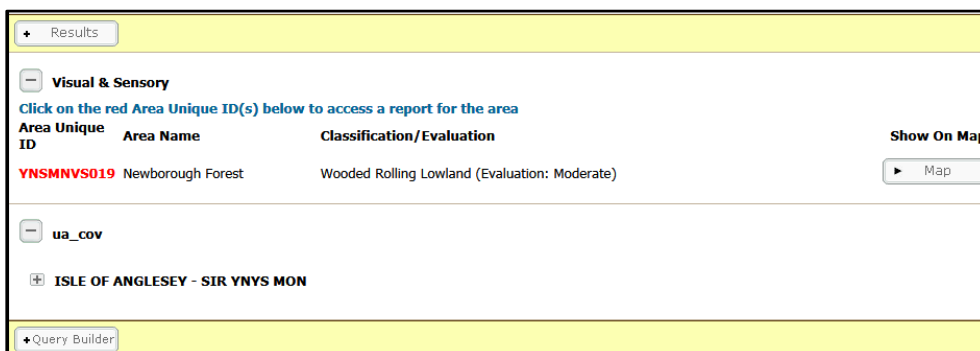
Step 3



Map control menu (top right)

This menu allows users to zoom in or out, move left/right/up/down or re-centre the map (icon with a cross), the hand icon allows you to move the map across. **Click on the yellow i to activate the info-tool, click on the map in the area you are interested in and this will select the data survey for that area**

The screen information will refresh and a data survey entry will be displayed below the map summarising the Unique ID, the name of the area, the classification and the overall evaluation.



If only the Visual & Sensory layer is selected, there is only one line of data information.

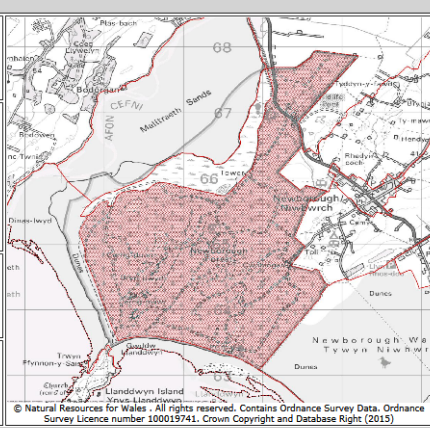
+ Results			
Geological Landscape			
Click on the red Area Unique ID(s) below to access a report for the area			
Area Unique ID	Area Name	Classification/Evaluation	Show On Map
YNSMNGLO51	Newborough Forest	Sand dune (Evaluation: Low)	Map
Landscape Habitat			
Click on the red Area Unique ID(s) below to access a report for the area			
Area Unique ID	Area Name	Classification/Evaluation	Show On Map
YNSMNLH044	Newborough Forest	Coniferous Woodland (Evaluation: Outstanding)	Map
Visual & Sensory			
Click on the red Area Unique ID(s) below to access a report for the area			
Area Unique ID	Area Name	Classification/Evaluation	Show On Map
YNSMNVSO19	Newborough Forest	Wooded Rolling Lowland (Evaluation: Moderate)	Map
Historic Landscape			
Click on the red Area Unique ID(s) below to access a report for the area			
Area Unique ID	Area Name	Classification/Evaluation	Show On Map
YNSMNHLO01	Newborough Forest	Woodland (Evaluation: High)	Map
Cultural Landscape			
Click on the red Area Unique ID(s) below to access a report for the area			
Area Unique ID	Area Name	Classification/Evaluation	Show On Map
YNSMNCL034	South west coast	Agricultural (Evaluation: Outstanding)	Map
ua_cov			
+ ISLE OF ANGLESEY - SIR YNYS MON			

If all LANDMAP layers are selected, five data lines will be returned.

Click on the red hyperlink to open the data survey, it will open in a new browser window and will look like the image below. A hatched map will show the extent of the survey selected, the data surveys have the same subsections no matter which LANDMAP dataset, but the questions and responses will be specific to the data layer you are viewing.

Visual and Sensory

Aspect Area Name	Newborough Forest
Aspect Area Classification	Lowland/Rolling Lowland/Wooded Rolling Lowland (Level 3)
Aspect Area Code	YNSMNVSO19
Date of Survey	25/01/2007



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Description

Physical Form And Elements: Topographic Form?	Rolling/Undulating
Physical Form And Elements: Landcover Pattern?	Woodland
Aesthetic Qualities: Scale?	Large
Aesthetic Qualities: Sense of Enclosure?	Confined
Aesthetic Qualities: Diversity?	Simple
Aesthetic Qualities: Texture?	Coarse
Aesthetic Qualities: Lines?	Angular
Aesthetic Qualities: Colour?	Muted
Aesthetic Qualities: Balance?	Balanced
Aesthetic Qualities: Unity?	Unity
Aesthetic Qualities: Pattern?	Organised
Aesthetic Qualities: Seasonal Interest?	Mixed
Other Factors: Level of Human Access?	Infrequent
Other Factors: Night Time Light Pollution?	Non-linked (No comment)

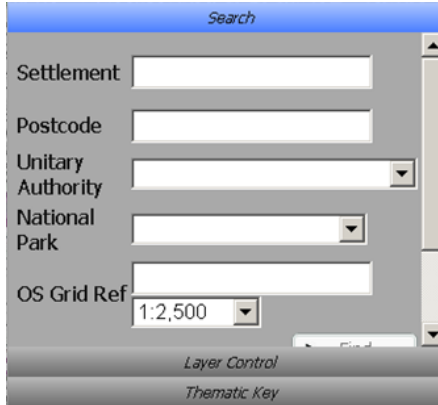
100%

A partial image of a visual and sensory survey, at the end of the survey there will be a print to pdf button, you can save the record this way. Be aware that once saved it will no longer be live linked to any updates.

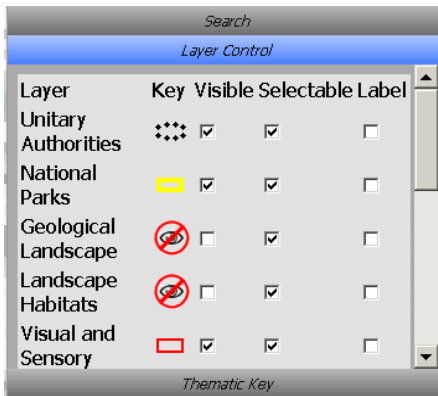
Additional menus and options

Search and layer control menu (left side, click the black arrow to open)

This menu has three different functions:



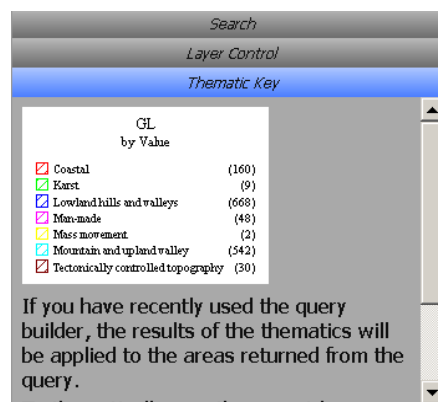
- **Search** used to choose a new area to display on the map or go back to the first Map Search page if you prefer



- **Layer control** lists all map layers currently being displayed on the map. LANDMAP data can be switched on/off by ticking/unticking the Visible properties. The Selectable property determines whether information is displayed with the Info Tool. The Label property switches the layer labelling.

Thematic map menu

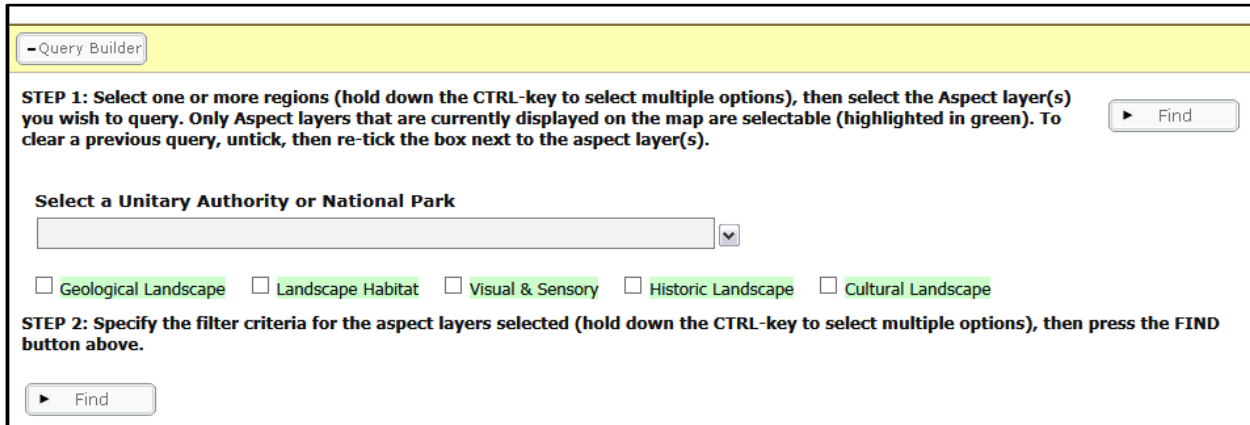
The thematic map drop down option can be used to display preset coloured maps based on the LANDMAP classification (level 1 or 2 only) or the overall evaluation score for that area. Once you've selected any of the map options from the drop down menu the map will automatically be redrawn. You can view the legend by going to the search and layer menu and selecting the thematic key option.



- Use the **Thematic key** to display a legend if any of the thematic maps are switched on. To remove a thematic map, set the Thematics to 'Reset Thematic'.

Query builder

Here you can perform simple queries using the LANDMAP data without GIS software. Click on Query Builder to open the following menu options.

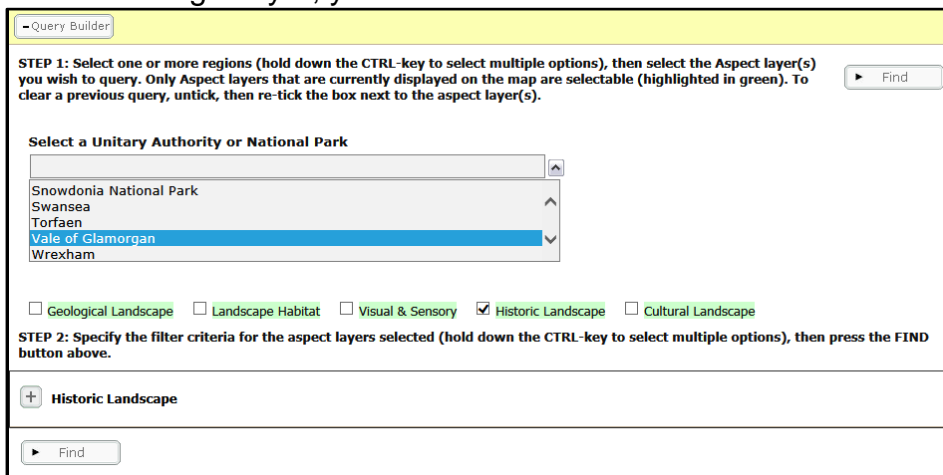


The screenshot shows the 'Query Builder' window. At the top, it says 'STEP 1: Select one or more regions (hold down the CTRL-key to select multiple options), then select the Aspect layer(s) you wish to query. Only Aspect layers that are currently displayed on the map are selectable (highlighted in green). To clear a previous query, untick, then re-tick the box next to the aspect layer(s).' There is a 'Find' button on the right. Below this is a dropdown menu labeled 'Select a Unitary Authority or National Park'. Underneath are five checkboxes: 'Geological Landscape', 'Landscape Habitat', 'Visual & Sensory', 'Historic Landscape', and 'Cultural Landscape'. Below these is 'STEP 2: Specify the filter criteria for the aspect layers selected (hold down the CTRL-key to select multiple options), then press the FIND button above.' and another 'Find' button.

Select the authority or national park you want to search in using the drop-down menu. You can select more than one county by holding down the CTRL-key, when selecting the area(s). A narrower search area works better.

Select the LANDMAP dataset/layer you want to query. Only layers that are visible on the map can be queried. If the layer you are interested in is greyed out or not visible at all, you'll need to go back to the first map page by clicking on the "map search" option at the top of the page and change the selected LANDMAP aspect.

After selecting a layer, you will notice that the name of the selected layer appears.



This screenshot shows the 'Query Builder' window after some selections. The dropdown menu is open, showing 'Snowdonia National Park', 'Swansea', 'Torfaen', 'Vale of Glamorgan' (highlighted in blue), and 'Wrexham'. The 'Historic Landscape' checkbox is now checked. Below the checkboxes, it says 'STEP 2: Specify the filter criteria for the aspect layers selected (hold down the CTRL-key to select multiple options), then press the FIND button above.' At the bottom, there is a box with a '+' sign and the text 'Historic Landscape', and a 'Find' button.

Clicking on the + sign next to the layer's name will open a form listing all questions and options that can be interrogated for this layer. LANDMAP questions that have an open text response cannot be queried. An example of the query form can be seen below.

STEP 2: Specify the filter criteria for the aspect layers selected (hold down the CTRL-key to select multiple options), then press the FIND button above.

Historic Landscape

Classification

Built environment (Level 1)
 Built environment/Industrial (Level 2)
 Built environment/Industrial/Extractive (Level 3)
 Built environment/Industrial/Extractive/Coal Mining (Level 4)
 Built environment/Industrial/Extractive/Metal Mining (Level 4)
 Built environment/Industrial/Extractive/Other Extractive (Specify) (Level 4)
 Built environment/Industrial/Extractive/Other Stone Quarrying/Mining (Level 4)
 Built environment/Industrial/Extractive/Peat Extraction (Industrial) (Level 4)

Monitoring

Does this area have a special or functional link with an adjacent area?
 Yes : No :

Has the information ever been verified in the field?
 Yes : No :

Has this record been updated following monitoring work?
 This record has been updated following monitoring work as more up to date information is available : This record has been updated following monitoring work, there was a real change in the aspect area : This record remains unchanged following monitoring work :

Change indicated by
 OS Data, Aerial Photographs : Satellite Imagery Interpretation : Phase 1 Habitat Survey & Seasonal Change Maps : Policies, plans & information resources : Fieldwork :

What has changed?

Description

If working at level 3, the classification describes the dominant historic pattern, but which other patterns are important to the historical pattern of this area? (Tick all that apply)

To query the data, select the question(s) you are interested in. Then go back to the **top** or **bottom** of the form and click on the **find-button**.

The results of the query will be displayed in the “results” section which can be found just **above** the query builder. In the example below, it displays the 6 areas in the Vale of Glamorgan Historic Landscape dataset that have been identified as showing a real landscape change (rather than updated information) as part of the landscape monitoring programme.

Results

Historic Landscape

Click on the red Area Unique ID(s) below to access a report for the area

Unique ID	Area Name	Classification/Evaluation	Show on map
VLFGHL002	Southern Vale Communication Corridor	Communications (Evaluation: Outstanding)	Map
VLFGHL011	Cogan and Pop Hill	Irregular Fieldscapes (Evaluation: High)	Map
VLFGHL013	Penarth and Dinas Powys Urban	Nucleated Settlement (Evaluation: Moderate)	Map
VLFGHL024	Michaelston-le-Pit and St Andrews Major	Irregular Fieldscapes (Evaluation: High)	Map
VLFGHL028	Aberthaw Industrial	Extractive (Evaluation: Low)	Map
VLFGHL030	Porthkerry Rural	Regular Fieldscapes (Evaluation: Moderate)	Map

Show all on map

Query Builder

STEP 1: Select one or more regions (hold down the CTRL-key to select multiple options), then select the Aspect layer(s) you wish to query. Only Aspect layers that are currently displayed on the map are selectable (highlighted in green). To clear a previous query, untick, then re-tick the box next to the aspect layer(s).

Select a Unitary Authority or National Park
 Vale of Glamorgan

Geological Landscape Landscape Habitat Visual & Sensory Historic Landscape Cultural Landscape

STEP 2: Specify the filter criteria for the aspect layers selected (hold down the CTRL-key to select multiple options), then press the FIND button above.

Historic Landscape

The easiest way to clear a previous query is to unclick in the question boxes next to any of the layers, or unclick the whole layer selected.

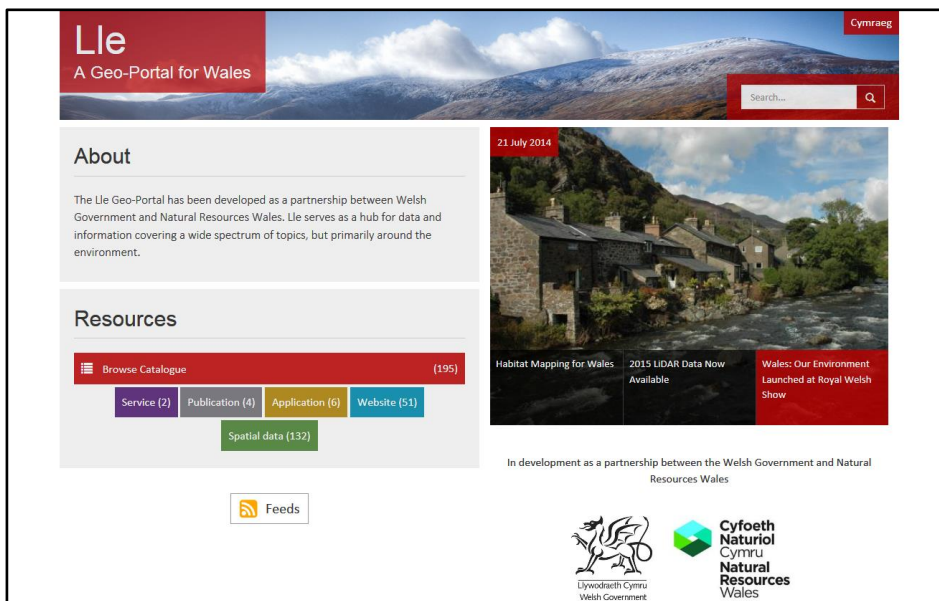
5 Downloading LANDMAP data

LANDMAP data is now available through a Web Feature Service (WFS), providing a direct, read-only, connection to the LANDMAP geodatabase.

LANDMAP data is available to download from the Lle Geo-Portal, a hub for environmental data and information. Once LANDMAP data is downloaded, you can open, view and interrogate the data in your own Geographical Information System (GIS) environment, enabling full use of the GIS functionality and overlaying LANDMAP data with other spatial datasets. You can download a **live linked version** that will always remain up to date **or a cached copy** that will not update itself but is preferable for statistical analysis/complex querying.

The quickest route to LANDMAP data is via <http://lle.wales.gov.uk/Catalogue?lang=en&text=landmap>

Alternatively, you can navigate to the LANDMAP section via the following route, go to the Lle Geo-Portal homepage <http://lle.gov.wales/home?lang=en>



Choose the green box for spatial data

Lle
A Geo-Portal for Wales

Cymraeg

Search...

Catalogue 132 Results

Refine by

LANDMAP x x

Type

- Clear
- Application
- Publication
- Service
- Spatial data
- Website

Category +

Organisation +

INSPIRE only 183

✕ Clear all

[Active Travel Designated Localities \(Wales\)](#)

Welsh Government

Spatial data for Active Travel Act (Wales) 2013 Designated Localities, as a result of Direction designating localities in relation to Active Travel routes.

The Welsh Ministers, in exercise of the powers conferred on them by section 2(4) and (5) of the Active Travel (Wales) Act 2013 ("the Act"), make the following Direction:

Section 2(1) of the Act provides that for

...More

Appears under **Spatial data** **Legislation**

[Air Quality data](#)

Department for Environment, Food and Rural Affairs (defra)

Type LANDMAP in the search box to refine the search, ensure spatial data is still ticked.

Lle
A Geo-Portal for Wales

Cymraeg

Search...

Catalogue 5 Results

Refine by

LANDMAP x x

Type

- Clear
- Application
- Publication
- Service
- Spatial data
- Website

Category +

Organisation +

INSPIRE only 183

✕ Clear all

[Landmap Cultural Landscape](#)

Natural Resources Wales

LandMap is a unique national information system, allowing information about landscape in Wales to be collected and organised into a nationally consistent dataset. The Landmap database includes both objective and subjective information and is designed to enable landscape quality to be taken into account in decision making. Geographic dataset showing cultural landscape classification for Wales in

...More

Appears under **Spatial data** **Planning**

[LandMap Geological Landscape](#)

Natural Resources Wales

LandMap is a unique national information system, allowing information about landscape in Wales to be collected and organised into a nationally consistent dataset. The LandMap data includes both objective and subjective information and is designed to enable landscape quality to be taken into account in decision making. This is a geographic dataset showing geological landscape

...More

Appears under **Spatial data** **Planning**

[Landmap Historic Landscape](#)

Natural Resources Wales

LandMap is a unique national information system, allowing information about landscape in Wales to be collected and organised into a nationally consistent dataset. The LandMAP database includes both objective and subjective information and is designed to enable landscape quality to be taken into account in decision making. Geographic dataset showing historical landscape classification for Wales in

...More

Appears under **Spatial data** **Planning**

[Landmap Landscape Habitats](#)

Natural Resources Wales

LandMap is a unique national information system, allowing information about landscape in Wales to be collected and organised into a nationally consistent dataset. The LandMap data includes both objective and subjective information and is designed to enable landscape quality to be taken into account in decision making. Geographic dataset showing habitat landscape classification for Wales in the

...More

Appears under **Spatial data** **Planning**

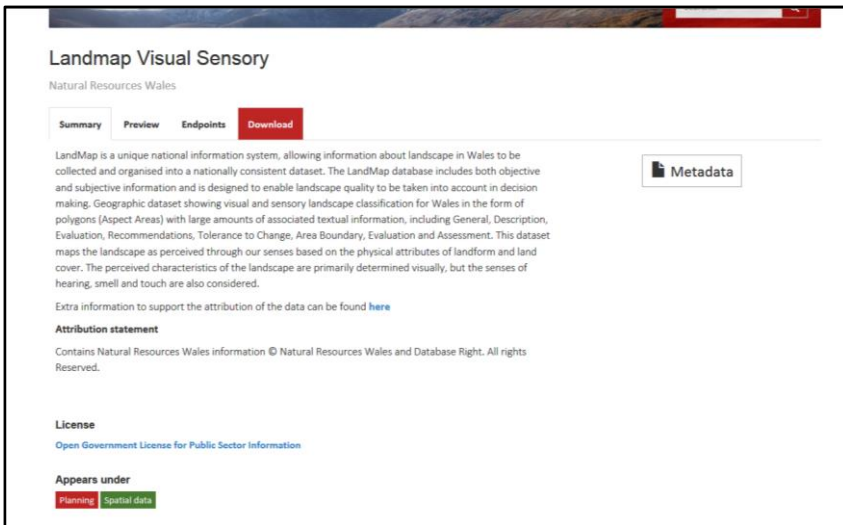
[Landmap Visual Sensory](#)

Natural Resources Wales

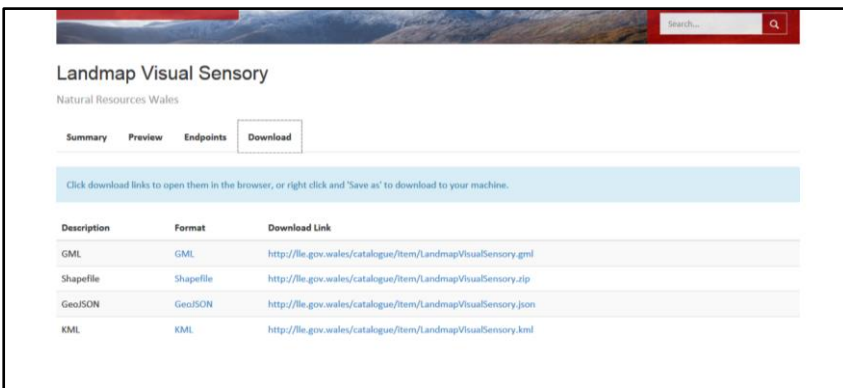
LandMap is a unique national information system, allowing information about landscape in Wales to be collected and organised into a nationally consistent dataset. The LandMap database includes both objective and subjective information and is designed to enable landscape quality to be taken into account in decision making. Geographic dataset showing visual and sensory landscape classification

...More

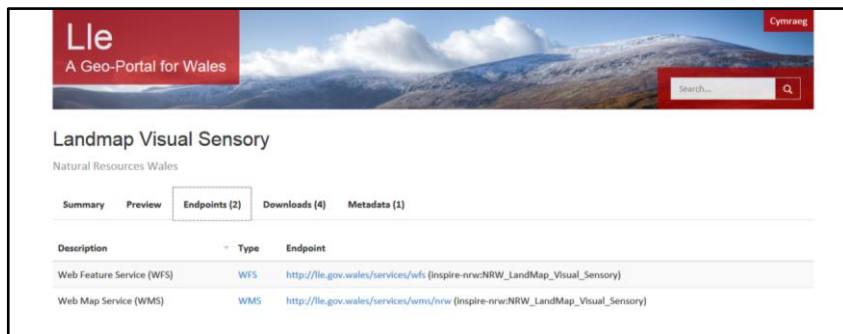
This will return the 5 LANDMAP datasets, each blue title is a hyperlink to the dataset.



Selecting a dataset, in this case the Visual & Sensory data, there are **TWO options to access the data:** Endpoints (LIVE) and Download (Cached copy)



The **Download** option offers a cached copy of the LANDMAP data in the formats on the left. This will be updated periodically but it is not live linked to the master database. If you are interrogating the data for complex queries or statistics, then this is the option to choose.



The Endpoint option provides a LIVE web feature service (WFS) to LANDMAP data. Once this is setup, the latest survey data will always be available, including all major and minor updates to the data. The live links to the source file is maintained so it's not a cached version.

No truncation

Some descriptive information is too detailed to be fully displayed in the GIS table and will therefore appear to be truncated. Data is not truncated, it is not easily readable in the small box provided in the GIS software.

A more readable version has been provided using a url link in the GIS attribute data directly into the master database. The web service receives and responds to the request for the html view for a survey area and provides a read-only html view of the survey directly in the users web browser. The url field in the GIS is in addition to, rather than instead of, the existing fields so there is no loss of thematic mapping options in the GIS.

Printing from GIS

Users may want to print and save a survey, the date of that version of the survey becomes particularly important as it will not dynamically update. Users are advised not to download LANDMAP but to use it live.

Surveys can be printed for use in a report (with date stamp) but they cannot be printed to PDF.

6 Contact

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