LANDMAP Methodology: quality assurance

The Welsh approach to describing, evaluating and quality assuring landscape character through the Geological Landscape, Landscape Habitats, Visual & Sensory, Historic Landscape and Cultural Landscape Services spatial datasets.

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What is this document about?

This document is a supplementary part of the LANDMAP methodology guidance for the Geological Landscape, Landscape Habitats, Visual & Sensory, Historic Landscape and Cultural Landscape Services. It replaces all 2016 LANDMAP methodology guidance.

This supplementary document sets out the questions to be completed as part of the quality assurance of LANDMAP data.

The complete set of LANDMAP Methodology guidance includes:

GN007a   LANDMAP Methodology Overview
GN007b   LANDMAP Methodology Datasets
GN007c   LANDMAP Methodology Classifications and Definitions
GN007d   LANDMAP Methodology Survey Questions and Definitions
GN007e   LANDMAP Methodology Quality Assurance

You can download the LANDMAP Methodology Guidance Note from the LANDMAP webpage page: [Natural Resources Wales / LANDMAP - the Welsh landscape baseline](#)

Who is this document for?

This guidance is aimed at all users of LANDMAP as a landscape evidence resource for Wales that need to understand how LANDMAP information is derived, and the definitions of terms, classifications, and evaluations.

Key users will be local authority and National Park landscape and planning officers, consultants engaged in landscape assessments, woodland planners, land management decision makers and those using landscape information as an opportunity.

The guidance is also aimed at those preparing new, or updating existing, LANDMAP datasets ensuring it is consistent and robust evidence.

Contact for queries and feedback

Planning, Landscape and Energy enquiries@naturalresourceswales.gov.uk

Version History

Document Version	Date Published	Summary of Changes
1.0	**03-2024**	**Document published**

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LANDMAP Quality assurance

To ensure national consistency and compliance with the LANDMAP methodology, the spatial dataset(s) and information must be quality assured and approved before becoming available.

Our quality assurance process is now focussed on updates since we already have national coverage of LANDMAP data. Updates may arise when it is agreed an amendment will improve the existing data entry, or as part of a planned review to reflect changes to landscape character since the original surveys were conducted.

The quality assurance process verifies that:

- The LANDMAP methodology has been adhered to.
- Appropriate resources for each layer have been consulted and used.
- The basis for updating or not changing surveys following monitoring are clearly explained, consistent and valid.
- The updating of LANDMAP GIS and surveys is accurately implemented.

Quality assurance should be based on an initial 10% of the total aspect area surveys that have been updated and 10% of the GIS amendments made. Repeat quality assurance assessments should select different surveys and GIS amendments. Complete the tables in the quality assurance form.

LANDMAP Quality assurance form

The quality assurance assessor should complete the details in Table 1.

Table 1: Key information

Key information	Details
LANDMAP dataset	
Planning authorities included	
Natural Resources Wales contact	
Specialist(s) updating LANDMAP	
Quality assurance assessor(s)	
Date	
Quality assurance report	Version

The quality assurance assessor should confirm the quality assurance outcome in table 2.

Table 2: Quality assurance outcomes

Outcome	GIS amendments	Updated surveys
All proposed changes are assured for accuracy, consistency, and compliance	Yes / No	Yes / No
Most changes are approved, some parts require further consideration	Yes / No	Yes / No
Not Assured and requires improving as per recommendations	Yes / No	Yes / No

Stage 1 Change detection

The quality assurance assessor should confirm which criteria have been achieved in table 3.

Table 3: Criteria to meet when changes are required

Criteria	Yes	No
All change detection pack maps and resources have been analysed and interpreted to identify aspect areas where significant landscape change is evident.		
All changes have been assessed to identify their impact on classification, boundaries, characteristics, qualities, evaluation, and recommendations.		
A summary monitoring table includes columns, for the aspect area UID and name, each change detection source, fieldwork, and a recommendation of change (GIS, survey, or both) and why.		
Aspect Areas where significant landscape change is evident have been reported in a monitoring table. The monitoring table attributes evidence for change from the resources available.		
The recommended classification amendments are appropriate.		
The recommended characteristics, qualities, evaluation, and recommendations amendments are appropriate. The evaluation amendments are consistent in the regional and national context.		
The recommended boundary amendments are appropriate and match well with other aspect areas and at authority boundaries.		
The monitoring table has been shared with the relevant planning authorities for comment. Any modifications and feedback have been reviewed and included.		

Stage 2 Updating surveys

The quality assurance assessor should confirm which criteria have been achieved in table 4.

Table 4: Criteria to meet when updating surveys

Criteria	Yes	No
All surveys demonstrate satisfactory completion of the monitoring section questions for aspect areas that are being updated and for those that are not changing.		
Selected surveys demonstrate accurate implementation and justification of the stage 1 recommendation for each aspect area.		
Spelling, grammar, and punctuation is accurate.		
The quality of the digitised GIS map is acceptable (no slivers/intersections/dangling nodes).		
GIS boundary amendments follow features, contours, or other specified criteria, are logical across authority boundaries and are justified in the survey.		
The live upload of updated surveys to the main server has been implemented and all GIS aspect areas link to the survey files and there are none left unmatched.		

Quality assurance recommendations

The quality assurance assessor should record the quality assurance recommendations that require addressing to achieve accuracy, consistency, and compliance with the current LANDMAP methodology in table 5. For specific survey and GIS amendments reference using the Unique Identifier (UiD) and aspect area name. Justify all actions required.

Table 5: Quality assurance recommendations record

Recommendation for improvement	Detail and justification

Add rows if required.