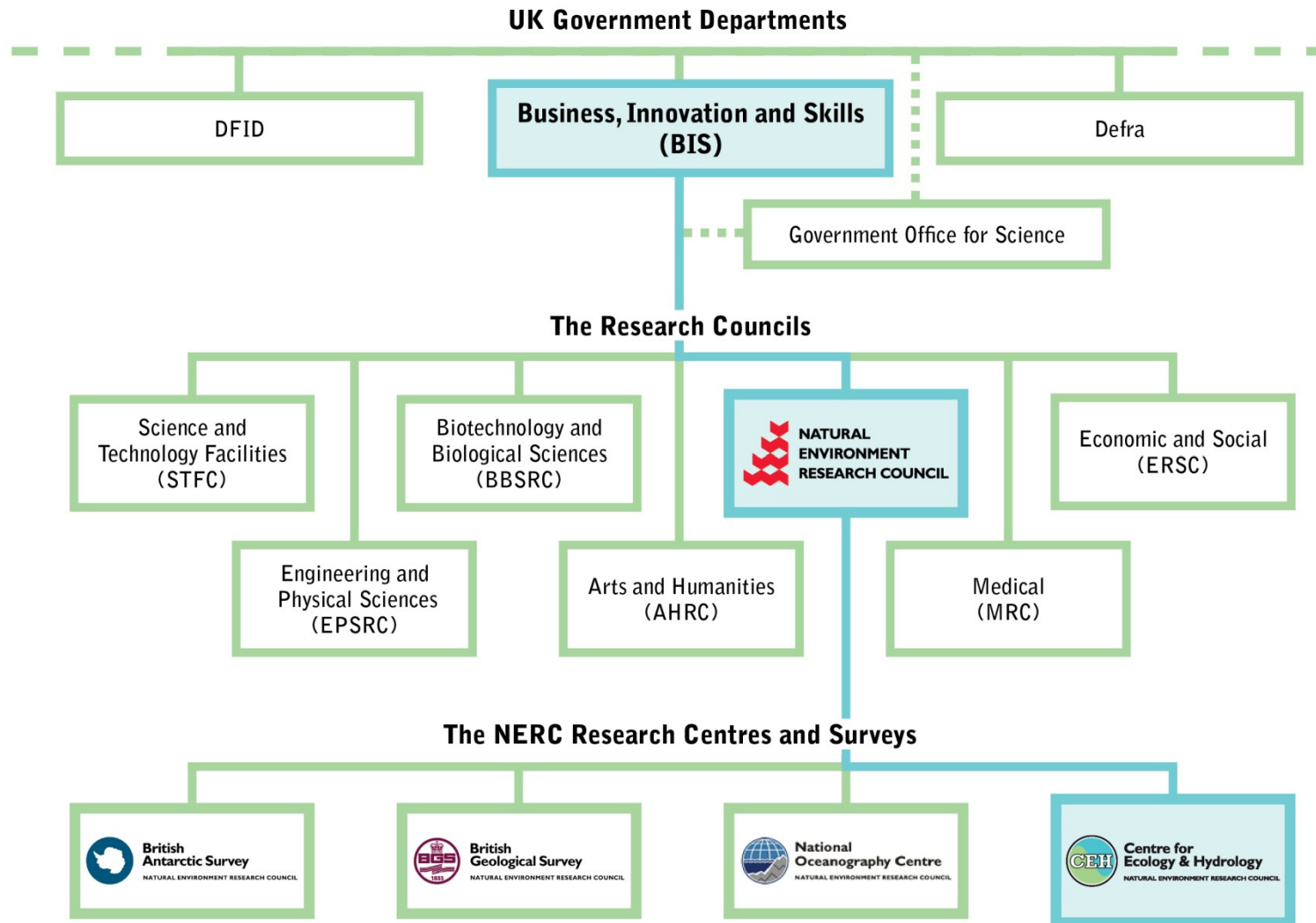




# NERC Centre for Ecology & Hydrology and the Environmental Information Data Centre

Gwyn Rees, Director EIDC

# CEH & NERC in a UK Government setting



# History of CEH

The Centre for Ecology & Hydrology (CEH) was formed in April 2000 from a merger of four long-established research institutes:

- **Institute of Terrestrial Ecology**
- **Institute of Freshwater Ecology**
- **Institute of Hydrology**
- **Institute of Virology & Environmental Microbiology**





# Resources

**325 scientists & 125 support staff spread across the UK**

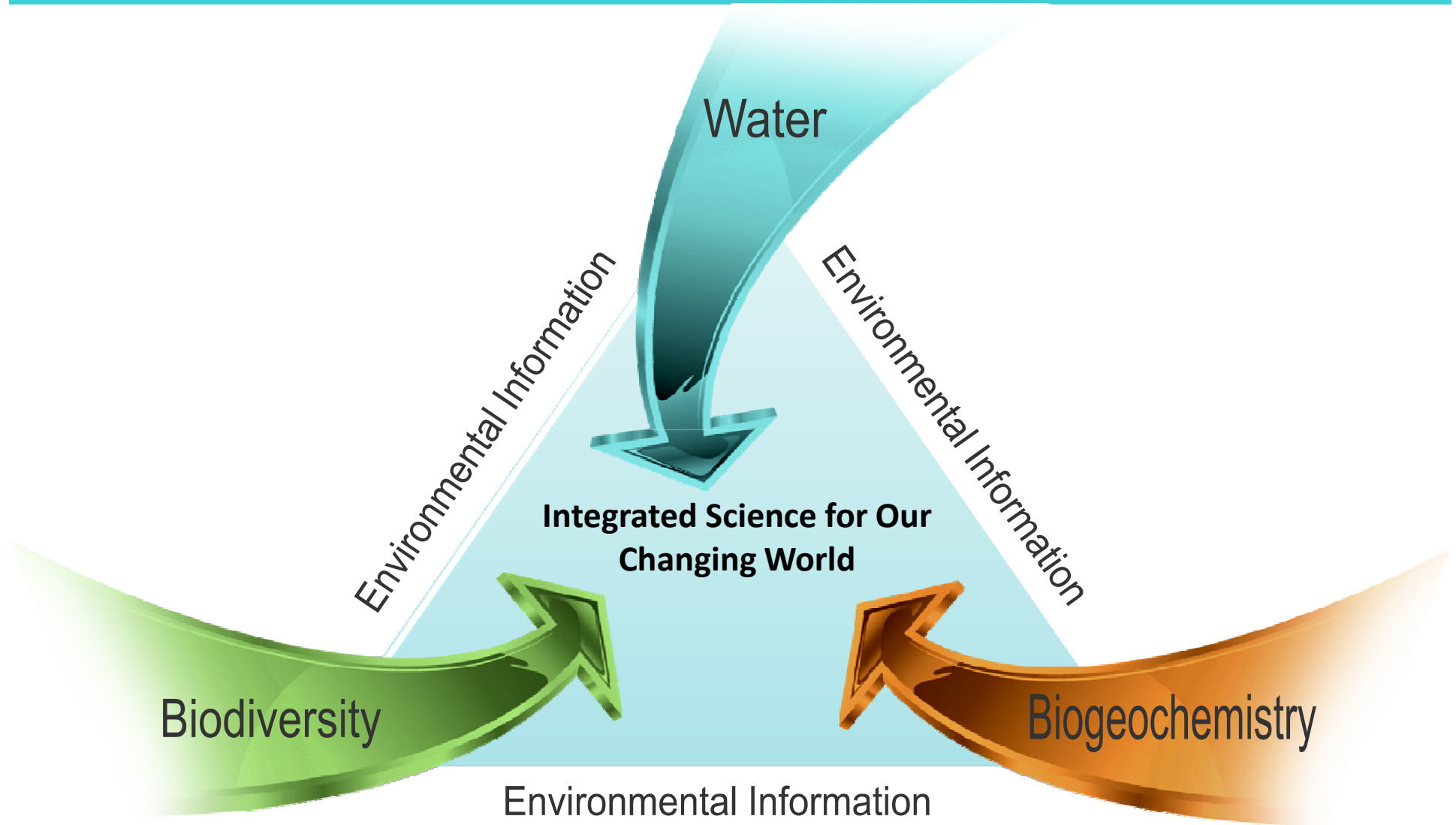


Photos - CEH



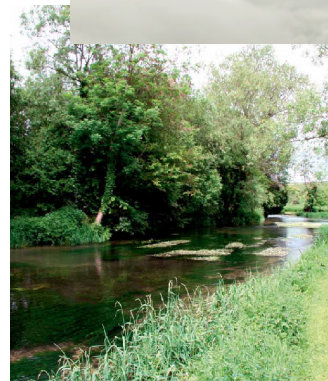
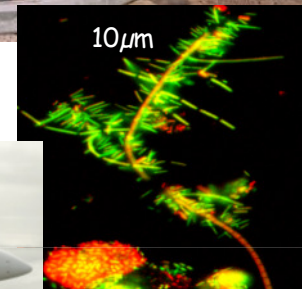
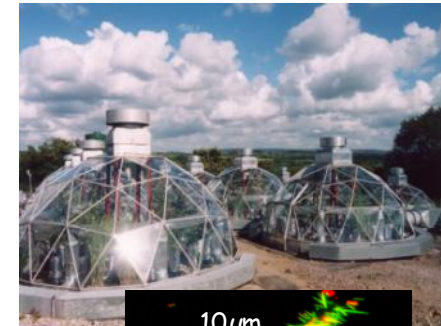


# EIDC integral to CEH science



# CEH monitoring and data collection

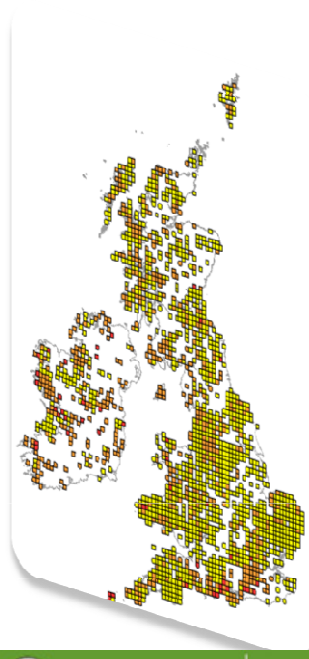
- As diverse as our science
- Micro- to macro-scale
- Many sources:
  - Monitoring campaigns
  - 180+ field sites
  - State-of-the-art facilities
  - Regulator networks
  - Volunteers
  - Model outputs
- Long-term and unique



# CEH data coordination – in partnership



**NRFA**



**BRC** Biological Records Centre



**Countryside Survey**



**Environmental Change Network**

**NBN** National Biodiversity Network

**Predatory Bird Monitoring Scheme**

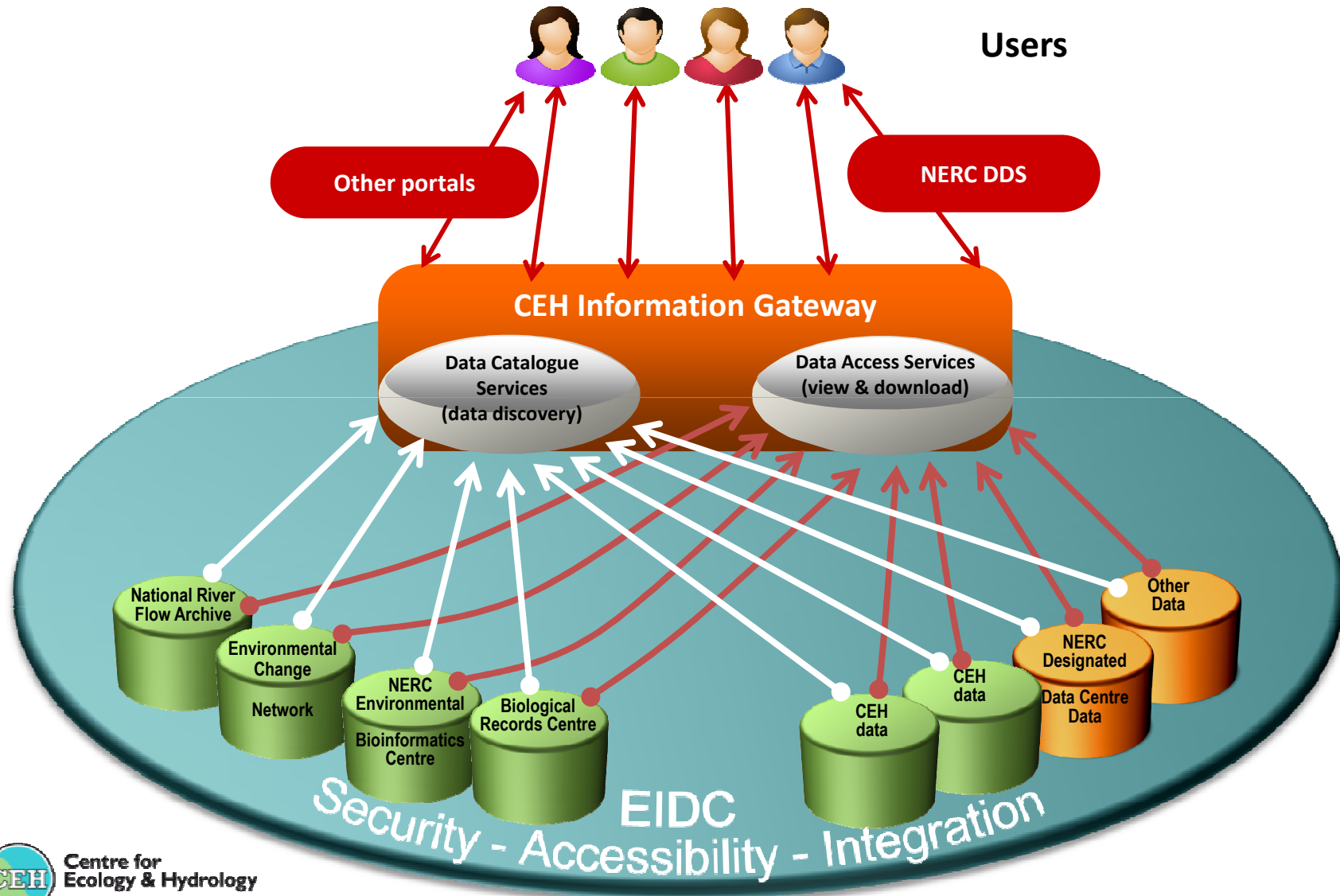
**CEH** Centre for Ecology & Hydrology  
NATURAL ENVIRONMENT RESEARCH COUNCIL

**ILTER**

**NEBC** NERC Environmental Bioinformatics Centre  
*Enabling environmental science in the molecular age*



# EIDC – a distributed data centre



The screenshot displays the CEH Information Gateway website. The main header includes the CEH logo, the text 'Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL', and 'INFORMATION GATEWAY'. A 'Help' link is visible in the top right corner.

The interface features a left-hand navigation pane with a 'Services' tab, a search bar, and a list of services including 'Biodiversity/LCM20001km', 'BGS Bedrock and Superficial', 'WORLD', 'GB OUTLINE', and 'GREAT BRITAIN'. A map of the United Kingdom is shown in the center, with a 'Reload map' button and a 'Pan' instruction at the bottom.

The 'Download Manager' section on the right displays the identifier 'c14d621e-a092-4c70-92ba-e67e61f235c1' and the title 'UK Land Cover for CHES'. Below this is a map of the UK with a blue overlay representing the land cover data.

The 'Authentication' section shows the user group 'CEH' and username 'jww', with a 'Logout' button and a link to 'Manage Your Profile'.

The 'Clip Data' dialog box is open, prompting the user to 'Please select the area you want to clip out or select the full dataset.' It includes a map of the UK with a red clipping polygon and a blue dashed dataset extent. The legend indicates 'Dataset Extent' (blue dashed) and 'Clipping polygon' (red solid). The 'Available clipping options' dropdown is set to 'User defined Polygon'. Navigation buttons at the bottom of the dialog include '< Previous', 'Next >', 'Cancel', and 'Finish'.

# Links to NERC Data Catalogue Service

NERC DCS - Metadata g: Land Cover Map 2007 (25m raster, GB) - Windows Internet Explorer

http://data-search.nerc.ac.uk/search/full/catalogue/ceh.nerc.ac.uk/\_NERC\_DMS\_0.7\_\_1300103183711.xml

File Edit View Favorites Tools Help

NERC DCS - Metadata g: Land Cover Map 2007 (25m ...

NATURAL ENVIRONMENT RESEARCH COUNCIL

## Data Catalogue Service

sharing NERC data

Home About the DCS Search for data Your comments About NERC science Contact us Privacy and cookies

Provide feedback

### About the DCS

Search for data

Results

**You are searching for...**

**everything** in the catalogue.  
**1897 results returned in 0.58 seconds.**

View the catalogue  
Edit this search

Bookmark this record with:

### Download

The metadata is available for downloading in the following formats:

- NERC format (CSV)
- NERC format (XML version 0.7)


This metadata complies with

### Details

**Title:** Land Cover Map 2007 (25m raster, GB)

**Abstract:** LCM2007 is a parcel-based thematic classification of satellite image data covering the entire United Kingdom. The map updates and upgrades the Land Cover Map of Great Britain (LCMGB) 1990 and LCM2000. Like the earlier 1990 and 2000 products, LCM2007 is derived from a computer classification of satellite scenes obtained mainly from Landsat, IRS and SPOT sensors. It also covers Northern Ireland and incorporates information derived from other ancillary datasets. LCM2007 was classified using a nomenclature corresponding to the Joint Nature Conservation Committee (JNCC) Broad Habitats, which encompasses the entire range of UK habitats. In addition, it recorded further detail where possible, incorporating land cover classes sought by other users. LCM2007 is produced in both vector and raster formats, with a number of different versions containing varying levels of detail and at different spatial resolutions. This dataset consists of the 25m raster version for Great Britain only.

**Geographic extent**



The metadata covers the area West - East from -9.227701° to 2.687637° and North - South from 60.850441° to 49.83726°. [Search for all metadata within this area.](#)

**Temporal coverage:** These data span the period from Friday 02 September 2005 to Friday 18 July 2008 inclusive.

**Resource locator:**

- miscellaneous**  
[Essential technical details](#) - Link to further technical details about this data
- [Countryside Survey Website](#) - Countryside Survey project website

Internet 100%



# Links to UK Government Portal

The screenshot shows a web browser window displaying the data.gov.uk website. The page title is "Land Cover Map 2007: 25m Raster, GB". The URL in the address bar is "http://data.gov.uk/dataset/land-cover-map-2007-25m-raster-gb1". The website header includes the data.gov.uk logo with "BETA" and the tagline "Opening up government". A navigation menu contains links for Data, Apps, Consultation, Forum, Blogs, Ideas, Linked Data, Resources, and About. The main content area features the dataset title "Land Cover Map 2007: 25m Raster, GB", posted by the Centre for Ecology & Hydrology on 29/05/2012. The text describes LCM2007 as a parcel-based thematic classification of satellite image data covering the entire United Kingdom. A "uk location" logo is visible next to the text. The page includes a "Share this" section with social media icons, a "Have you used our data to create an application?" section with a "Share your app" button, a "Have you got a good idea for the data?" section with a "Share your idea" button, and a "Do you want more data?" section with a "Request new data" button. A "Metadata" section offers a link to "Get this dataset's meta-data in JSON format". A "More like this" section lists a related dataset: "Land Cover Map 2007: 25m Raster, N. Ireland". The browser's status bar at the bottom shows "Internet" and "100%".

data.gov.uk<sup>BETA</sup>  
Opening up government

Land Cover Map 2007: 25m Raster, GB

Posted by Centre for Ecology & Hydrology on 29/05/2012 | 0 comments | ★★★★★

LCM2007 is a parcel-based thematic classification of satellite image data covering the entire United Kingdom. The map updates and upgrades the Land Cover Map of Great Britain (LCMGB) 1990 and LCM2000. Like the earlier 1990 and 2000 products, LCM2007 is derived from a computer classification of satellite scenes obtained mainly from Landsat, IRS and SPOT sensors. It also covers Northern Ireland and incorporates information derived from other ancillary datasets. LCM2007 was classified using a nomenclature corresponding to the Joint Nature Conservation Committee (JNCC) Broad Habitats, which encompasses the entire range of UK habitats. In addition, it recorded further detail where possible, incorporating land cover classes sought by other users. LCM2007 is produced in both vector and raster formats, with a number of different versions containing varying levels of detail and at different spatial resolutions. This dataset consists of the 25m raster version for Great Britain only.

uk location

▼ Overview

Tags: CEH Biodiversity programme CEH Project NEC03259 england gb Great Britain Habitats and biotopes Land cover LCM2007 NERC\_DDC scotland wales

Department: Centre for Ecology & Hydrology

Published by: Centre for Ecology & Hydrology

Resource type: Dataset

Share this

Have you used our data to create an application?  
Let us know...  
Share your app

Have you got a good idea for the data?  
We can help you find a developer...  
Share your idea

Do you want more data?  
Request new data

Metadata  
Get this dataset's meta-data in JSON format

More like this  
> Land Cover Map 2007: 25m Raster, N. Ireland

# Links to European INSPIRE Portal

The screenshot displays the INSPIRE Geoportal interface within a Windows Internet Explorer browser window. The browser's address bar shows the URL <http://inspire-geoportal.ec.europa.eu/discovery/>. The page header features the European Commission logo and the text "INSPIRE GEOPORTAL Enhancing access to European". Below the header, there is a search bar with "Europe" entered and a "Find a place in:" dropdown menu. A map of the United Kingdom is displayed, showing a red bounding box around the country. The map includes labels for "Dublin", "Belfast", "Irish Sea", "North Sea", and "Amsterdam". The "Active Layers: 1" section shows a layer named "Land Cover: Dominant Aggregate Class GB 1km: Dominant Aggregate Class GB 1km". A metadata window titled "Land Cover Map 2007: 25m Raster, GB" is open, displaying the following information:

- Metadata Language:** English
- Resource Language:** English
- Resource Abstract:** LCM2007 είναι ένα βασίζεται στο αγροτεμάχιο θεματική ταξινόμηση δεδομένων εικόνας μέσω δορυφόρου που καλύπτουν το σύνολο του Ηνωμένου Βασιλείου. Ο Χάρτης ενημερώνει και αναβαθμίζει την γη καλύπτει χάρτη της Μεγάλης Βρετανίας (LCMGB) 1990 και LCM2000. Όπως τα προϊόντα νωρίτερα 1990 και 2000, LCM2007 προέρχεται από υπολογιστή ταξινόμηση των δορυφορικών σκηνές που λαμβάνονται κυρίως από αισθητήρες Landsat, IRS και ΕΠΙΤΟΠΟΥ. Επίσης καλύπτει την Βόρεια Ιρλανδία και ενσωματώνει τις πληροφορίες που προέρχονται από άλλες βοηθητικές σύνολα δεδομένων. LCM2007 είχε ταξινομηθεί χρησιμοποιώντας μια ονοματολογία που αντιστοιχεί σε ευρεία οικιστών η Μεικτή Επιτροπή διατήρησης των φύση (JNCC), που περιλαμβάνει τα ενδιαφέροντα ολόκληρη περιοχή του Ηνωμένου Βασιλείου. Επιπλέον, σημείωσε περαιτέρω λεπτομερειών, όπου είναι δυνατόν, την ενσωμάτωση της κάλυψη κλάσεις ζητείται από άλλους χρήστες. LCM2007 παράγεται σε μορφές vector και raster, με ορισμένες διαφορετικές εκδόσεις που περιέχουν διαφορετικά επίπεδα λεπτομέρειας και σε διαφορετικές χωρικών αναλύσεις. Από το dataset

The browser's taskbar at the bottom shows the system clock, Internet Explorer icon, and a 100% zoom level.



# Innovation & technical development

## Enabling interoperability

- defining standards, ontologies, linked-data
- complex (multi-disciplinary) questions

## Exploiting new technology

- HPC, cloud, sensor-web

## Developing new tools & systems

- Data capture, data mining, assimilation, visualisation

## Cultivating strategic partnerships

- Business/commerce (ESRI, Google, Syngenta)
- national & international (EU, USA, worldwide)
- leverage funding for policy-relevant, applied science





# This afternoon's excursion



Centre for  
Ecology & Hydrology  
NATURAL ENVIRONMENT RESEARCH COUNCIL

## Hydrology Domain Working Group Workshop

Wednesday 27 June 2012

Wittenham Room (LCR) & Thames Room

### Agenda

12:30	<b>Arrive CEH</b>	
	<i>Lunch served in the Thames Room</i>	
13:15	<b>CEH talks &amp; brief discussion</b>	
	<ul style="list-style-type: none"><li>• Matt Fry - Introduction</li><li>• David Roy – The Biological Records Centre</li><li>• Tim Booth – Genes in the environment - what we want to know and how to capture it</li><li>• Steven Cole – Flood Forecasting</li></ul>	
14:20	<i>Tea and coffee</i>	
14:30	<b>Walk to HR</b>	
14:45	<b>HR Site Visit</b>	<i>Quillon Harpham/ Kieran Millard</i>
	<ul style="list-style-type: none"><li>• Group 1 – Tour of the Froude Modelling Hall</li><li>• Group 2 – Ship Simulator Demonstration</li></ul>	
15:30	<b>HR Site Visit</b>	<i>Quillon Harpham/ Kieran Millard</i>
	<ul style="list-style-type: none"><li>• Group 1 – Ship Simulator Demonstration</li><li>• Group 2 – Tour of Froude Modelling Hall</li></ul>	
16:15	<b>Depart HR</b>	<i>Gwyn Rees</i>
17:15	<b>Tour of Lamboum Observatory Boxford</b>	<i>Colin Roberts/ Gareth Old</i>
18:15	<b>Transfer to The Bell in Boxford</b>	
18:30	<b>Drinks and Dinner</b>	
20:30	<b>Depart Boxford</b>	
21:00	<b>Approx arrival in Reading</b>	



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# Thank you!