

FC Map Browser with Land Information Search – user guidance

Purpose

This Operations Note provides customers with guidance on how to use the Forestry Commission map browser and how to run a Land Information Search.

Introduction

The Forestry Commission (FC) map browser was launched in December 2018. As part of the England Tree Planting Programme, in October 2021 the FC launched the first in a series of developments to its map browser and Land Information Search (LIS), improving the experience for users. These developments include the expansion of data available to users through the addition of 54 interactive data layers, as well as updating the LIS to enable users to better identify constraints and opportunities for woodland creation.

This guidance will help you understand the basic functionality and take you through the process of using the tools within the map browser.

Access to the FC map browser

The Map Browser can be accessed via GOV.UK guidance page: [Forestry Commission map browser and Land Information Search](#).

What is the map browser for?

The FC map browser is a public information tool that allows you to view data layers published by the Forestry Commission. You are able to see how they interact with areas of land you have an interest in, and can identify various agreements for forestry and woodland management activity that has been approved.

The map browser should be used by:

- anyone planning to undertake forestry activities, to aid with their planning and stakeholder engagement

- anyone who has an interest in forestry or woodland management activity in their area, and who wants reassurance that the work is legitimate

Note: Not all the data layers that are relevant to forestry activity are able to be shown on the FC map browser (due to licensing and data sharing issues), so users should also check the www.MAGIC.gov.uk map browser as part of any map searches you are doing.

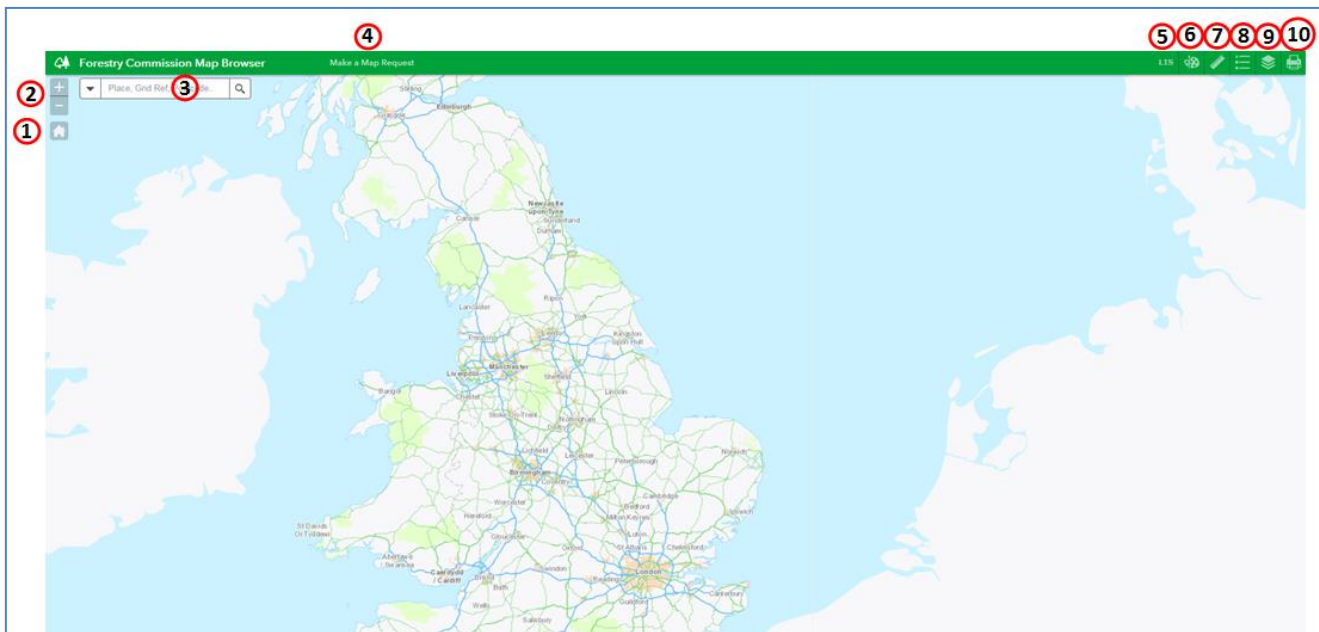
The functions the map browser could assist with include:

- creating (to draw and / or measure) new features or boundaries on an Ordnance Survey map backdrop, and to print those new features as part of a new PDF map;
- identifying approved (current and legacy) grant schemes and felling permissions;
- searching against the published data layers to see what features or designations of interest influence a particular areas of land;
- producing a constraints check report against a proposal area, as evidence that you have carried out these basic checks; and
- engaging with stakeholders once you have assessed the results of a LIS check.

Screen layout

This section will explain the layout of the map browser and what each control button can be used for.

1. Click this home button to return the map back to the England view
2. Zoom in and zoom out functions
3. Gazetteer search bar – can search by grid reference, postcode, place name
4. Link to the .gov.uk\Map Request Service webpage and form
5. Pops open Land Information Search within Map Browser
6. Draw shapes and add text
7. Measurement tools
8. Legend for the map layers selected
9. Lists of available map layers to turn on and off
10. Print button



Navigation of the map browser

There are various ways to navigate the map browser. The most common are as follows:

- enter a Grid Reference, Post Code or Place Name into the search bar
- drag the map using the left button on the mouse
- zoom into the map using the + and – zoom functions on screen, or by scrolling on your mouse wheel
- you can also press 'Shift' and then drag on the map to create a box; this then zooms in to that extent

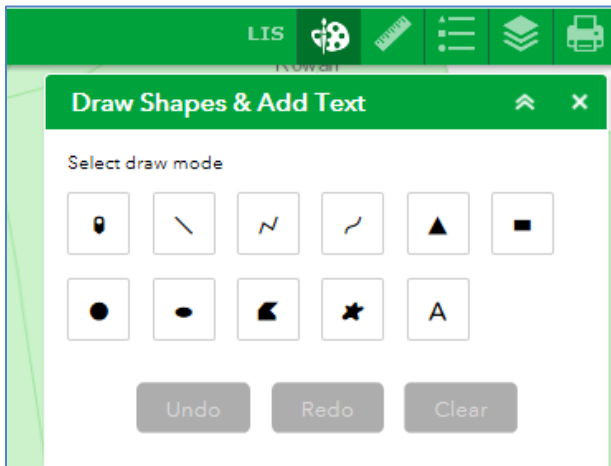
Using the draw tools

The Draw tool is used to draw on the map in your chosen location, or to label your drawing on the map. You cannot save your drawings on the Map Browser, or edit the features you draw - these are for printing only.

The Draw icon is shown below.



Once you click on this icon, the list of options shown below will open.



To draw a Point:

- click the Point icon
- then, choose the style of the point, such as the colour, style and outline
- then, Click in the map where you want your point to appear

To draw a Line:

- click one of the Line icons
- then choose the style of the line, such as the colour, style width and transparency
 - switch on the **Show distance measurement** and set the unit of measurement if you want to know how long the line drawn is
- then, click on the map where you want your line to start
 - for a straight line, drag the line from start point to end point
 - for a multi-directional line, click at every point your line changes direction, and double-click on the last point of the line to finish
 - for a freeform line, click and then move the mouse along the proposed route

To draw Shapes:

- click the Shape icon you would like to draw: triangle, square, circle, ellipse
- choose the style of the shape, such as the colour, line width and transparency
 - switch on the **Show area measurement** and choose a measure unit if you want to know big your shape area is
 - switch on the **Show distance measurement** and choose a measure unit if you want to know what the perimeter distance of your area is

Then, for fixed shapes:

- click on the map where you want your shape to start, and drag your click until it reaches the extent intended

Then, for free hand shapes:

- click at every point where your shape edge changes direction. When you have made three points or more, a shape will begin to develop. Double-click on the last point of the shape to finish

Then, for a freeform shape:

- click and then move the mouse along the proposed boundary

When you have completed your drawn feature, if you have selected the area / perimeter distance measurements, these will be shown on the map as labels against your shape.

To add Text:

- click the Text icon
- write the text you want to appear on the map in the text box
 - this should be used, for example, to add an OS Grid Reference onto the map you are creating at e.g. the entrance to a woodland. You must click outside the text box field to show a preview of the text
- adjust the font colour and font size
- click on the map where you want to drop the text
- if you place it in the wrong place, you can press 'undo' and then drop the text again

To delete anything you have drawn:

- if you need to, or want to delete the last item drawn, click **Undo**
- alternatively, click **Clear** if you want to start again. **Clear** will delete everything on the map

You cannot edit the points, lines or shapes you have drawn, or the text when applied, so you will need to use the **Undo** or **Clear** buttons to fix any errors.

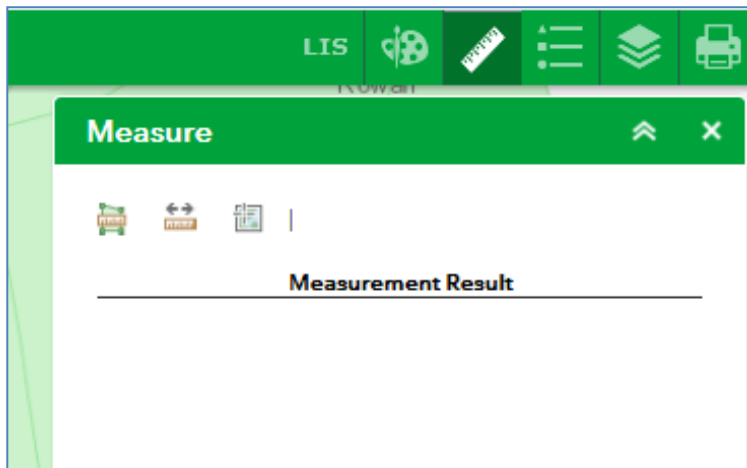
Using the Draw tool settings will allow you to measure the distance and area of your feature if you switch this 'on'. However, if you want to use the Measure tools separately, this is explained below.

Using the measure tools

The Measure tool can be an alternative way to measure a drawn item on your map. The Measure icon is shown below.



Once you click on this icon, the list of options shown below will open.



To measure the Area:

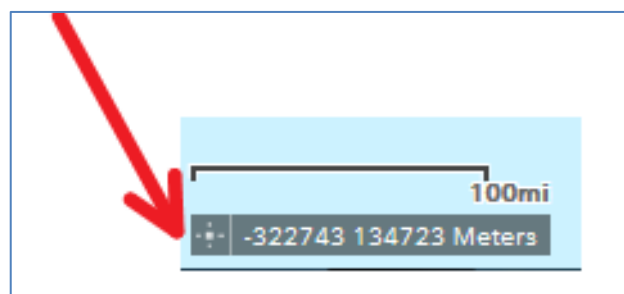
- click the Area icon
- choose your unit of measurement
- draw around the area you are interested in, or over the shape or line you have already created. Double-click on the last point of the shape to finish

To measure the Distance:

- click the Distance icon
- choose your unit of measurement
- draw along the line or boundary you are interested in, or over the shape or line you have already created. Double-click on the last point of the shape to finish

If you 'hover' your mouse over a particular point on the map, the grid reference of that point will show in the bottom left-hand corner of the map.

There's a cross icon on the bottom left-hand corner, if you click this and then click on the map, the grid reference freezes at this location which will allow you to copy and paste the grid reference.



Using the map layers

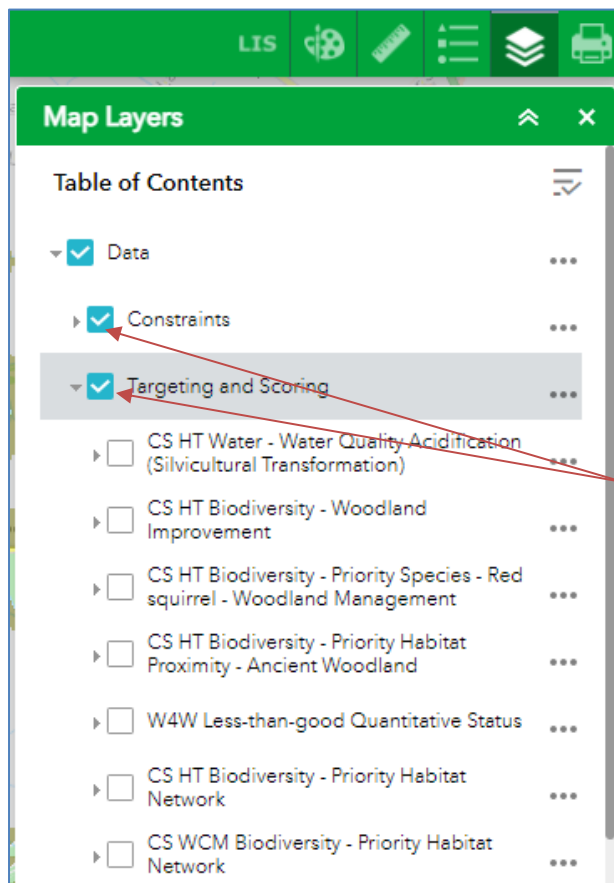
The FC map browser hosts a series of forestry and woodland management-related map layers, and these are divided into a series of themed folders. The Map Layers icon is shown below.



Once you click on this icon, the list of folders will open.

Click on the blue square to open a map layer folder.

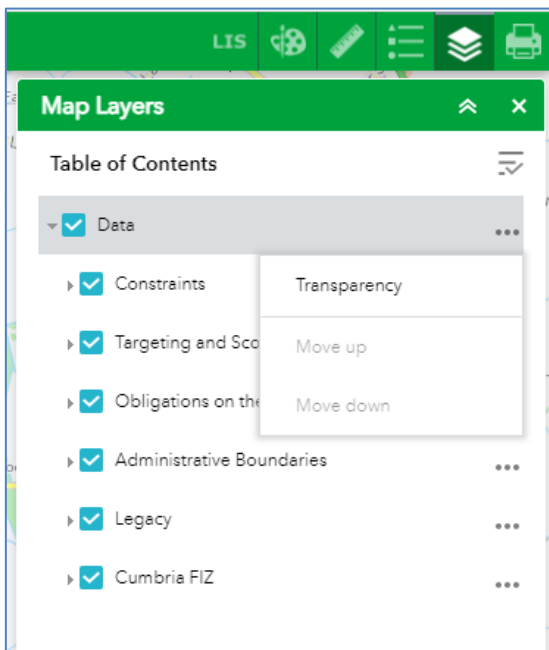
Within a selected folder, you can then switch each individual map layer on or off by clicking the individual map layer tick boxes.



Switching different layers on and off will immediately be reflected on the map.

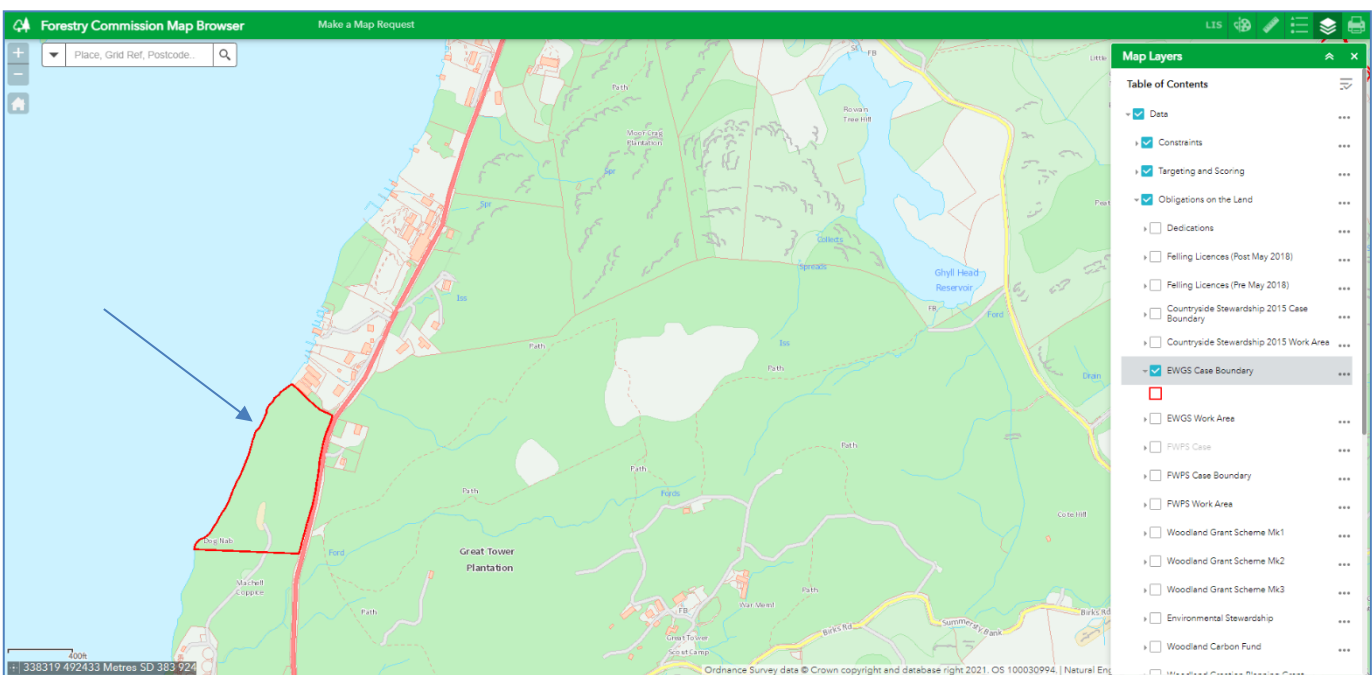
There is no need to refresh the screen.

Note that the layers will only be visible on the map if the parent folder is switched on.



Some map layers have a coloured fill that blocks out the background map.
You can also change the transparency of the map layers by clicking on the ellipses (the three dots) on the 'Data' folder in the map layer tool.

In the example below the 'EWGS Case Boundary' layer switched to 'on'.



You can see on the left of this image that part of the map has a red boundary, where the EWGS map layer selected overlays the background map.

You can expand each of these map layers by clicking the dropdown (the arrow head next to the layer tick box) to show a legend; this shows what the different components of the map layer are. In this example you can see in the map layers list, that the legend for EWGS has been expanded to show that the boundary of a EWGS case is shown in red.

If you click on any map layer feature on the map browser, you will see a popup providing basic information about what that particular feature is.

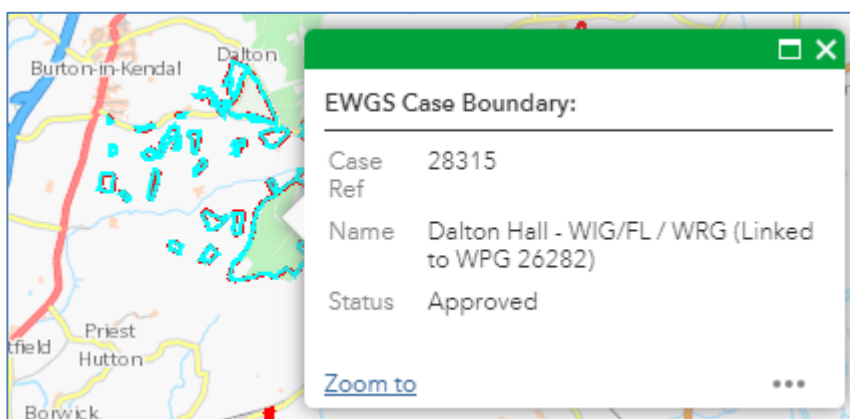
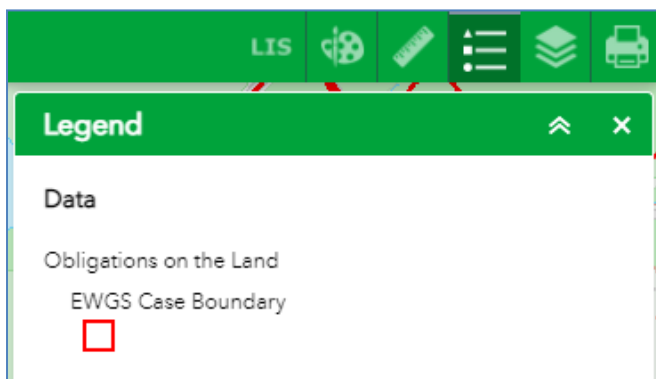
Using the Map Legend

The Legend tool can be used to view the relevant legend for a particular layer. The Legend icon is shown below.



Once you click on this icon, a list of legend information will open in the tab.

From the previous example, the EWGS Case Boundary is switched on, so, by clicking the Legend tool you can view the EWGS Case Boundary legend. The Legend tool will show the legend for all the map layers that are open at the point you select it.



If you click on any map layer feature on the map browser, you will see a popup providing basic information about what that particular feature is.

Printing and saving your map

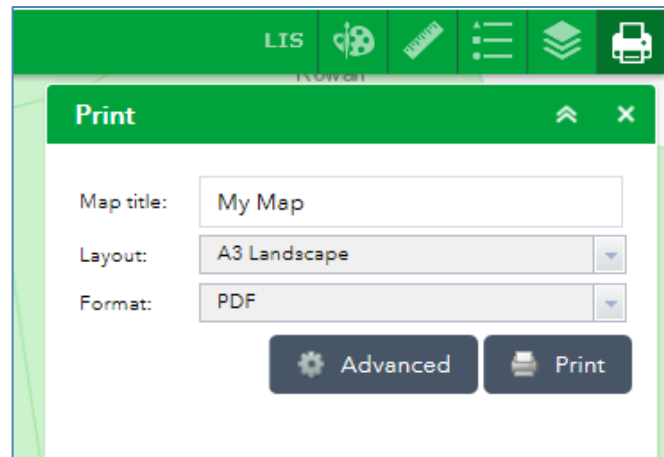
To save the map you have created, click the Print icon. The Print icon is shown below.



Once you click on this icon, the Print tool will open.

To Print or Save:

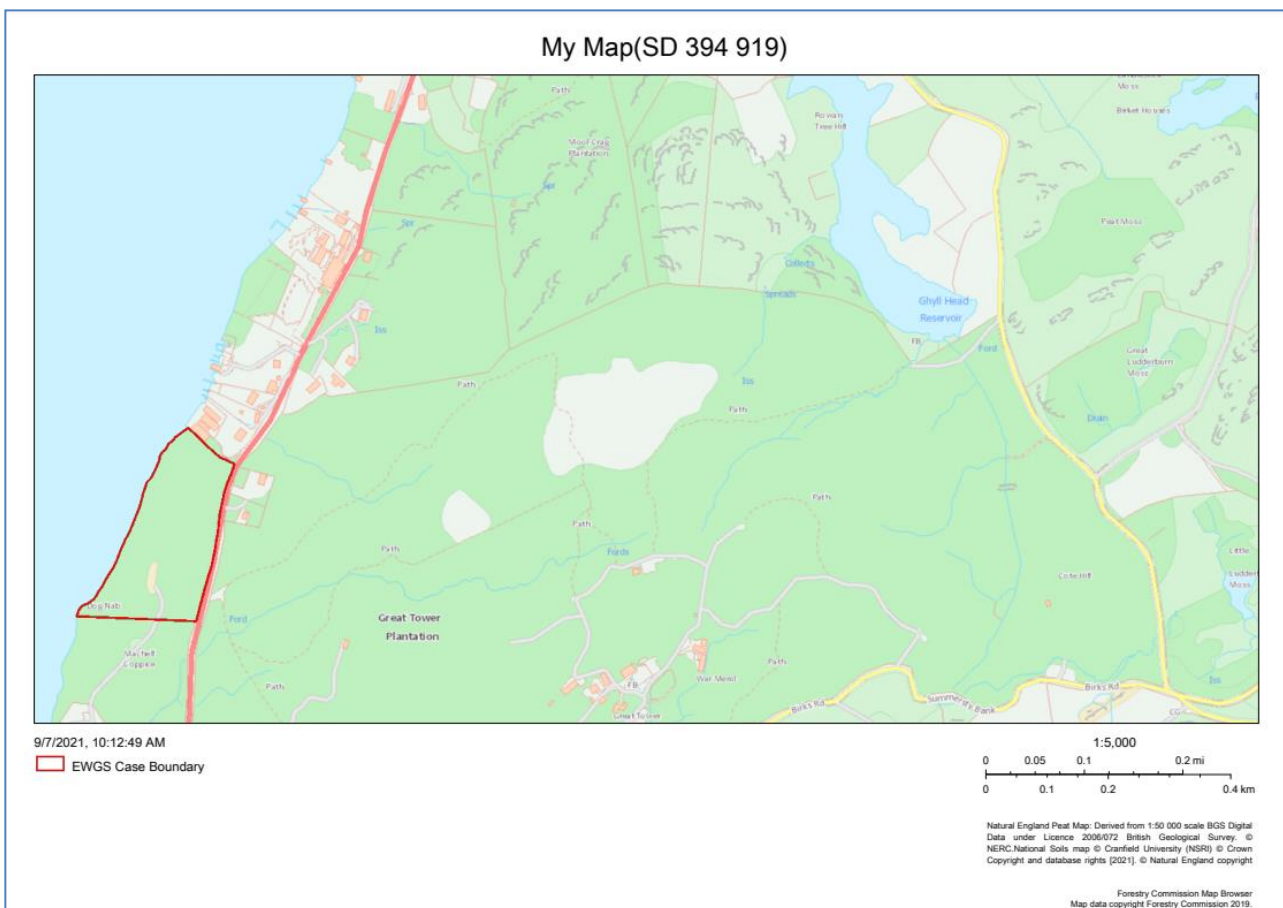
- type in your map title
- select the paper orientation and page size (portrait or landscape / A4 or A3)
- select the print format. This is automatically set to PDF, but there are other options in the dropdown. Make sure your system is able to support alternative print formats
- then press Print



A scrolling bar icon appears which, once the map has been generated, changes to a PDF icon. You can click on this to open the PDF map and view it.

The PDF map can then be saved to your local desktop, or printed using the print options on your computer or via the PDF itself.

An example map PDF.



The PDF map will show what you have drawn as a feature and what layers you have selected or switched on. The PDF map will also show the map title and scale. You will have to add an OS Grid Reference manually using the Text tool.

To use Advanced print function:

There are also advanced print functions which allow you to set map scale and extent, to include the map legend or not, and to set the size of the image and the DPI (dots per inch) of the PDF.

FC Land Information Search

A Land Information Search (LIS) is a check run on a feature or shape you have drawn in the LIS tool against all the other data layers on this map browser.

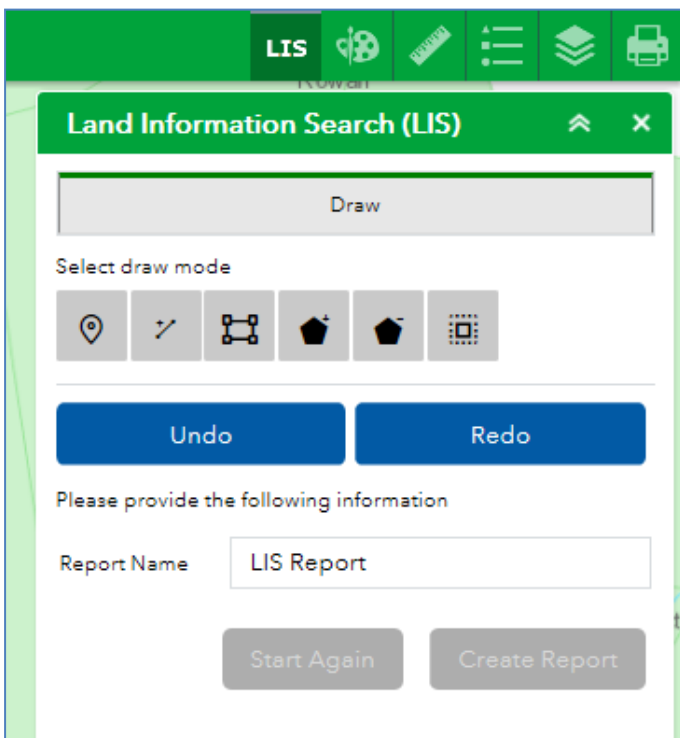
The LIS report generated will detail what other features or interests overlap or lie near the location you have drawn.

This section will explain how the Land Information Search tool is used.

The LIS icon is shown below.



Once you click on this icon, the LIS tool will open.



Using the LIS tool to create a LIS report

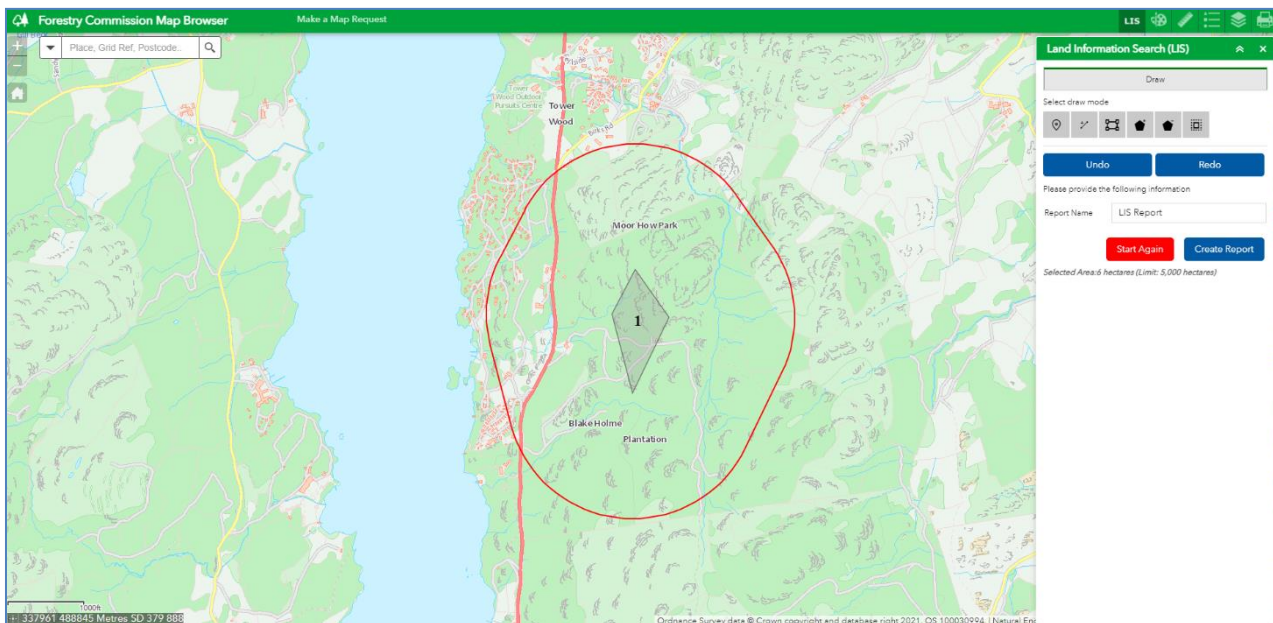
Important to Note:

To run a LIS check, you must draw your feature polygon (lines or shapes) **in the LIS tool** in order to run a LIS report. You cannot use features (shapes or points) you have drawn previously on the Map Browser.

Draw a feature to search against:

Using the LIS tool, you are able to select drawing tools to draw a point, a line, a rectangle or any other shape of polygon, using the methods explained in [Navigation of the map browser](#).

However, within the LIS tool, when you have finished drawing your feature or area of interest, an automated buffer (a red line) will appear around your shape(s) and your shape will be automatically numbered, as shown below.



Draw more than one feature:

On completion of the first shape, simply drag the map to the new location, or use the zoom in / zoom out tools, and draw the next feature.

The new feature will automatically be buffered when you finish drawing, and will be given the next automated number in the sequence. This is so you can identify which feature or area is which when viewing the LIS report.

You can draw a combined maximum of 5000 hectares in one report.

Use the Cut tool:

Having drawn a shape or feature you now want to remove part of it.

- click the *Cut* icon
- draw on your shape the section you want to be removed. Double click to finish.

The *Cut* tool will remove the section you have selected.

Fixing errors:

If you think you have made a mistake when drawing, you can use the *Undo* tool to go remove the features you have drawn, one at a time.

Equally, you can use the *Redo* button to reinstate features that you have just removed using the *Undo* button.

Alternatively, you can use the *Start Again* button, but this will clear all your activity to that point, and means you will need to start all your work again.

Running a LIS report

To run a LIS report on a feature or features you have drawn, follow these steps.

- fill in the *Report Name* section to give your LIS report a title
- click *Create Report*. This will run a constraints check against all layers

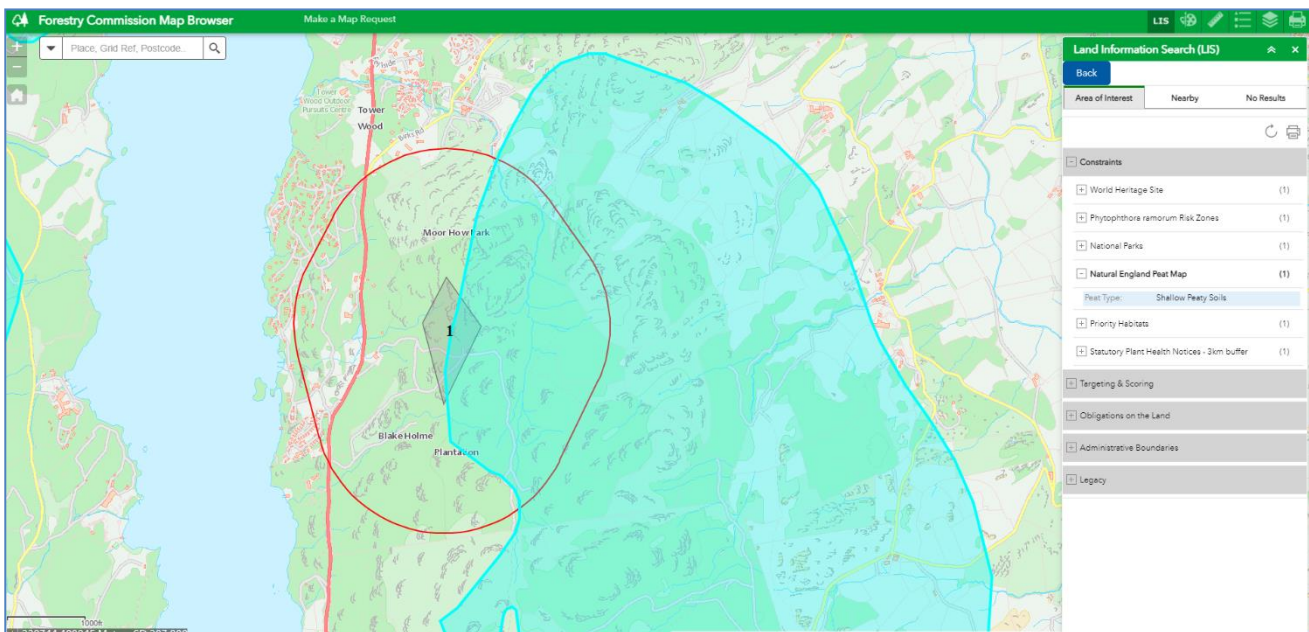
LIS Search results

Initially your results will be shown via the Land Information Search tab. The tab is broken into three categories;

Area of Interest:

Results that appear under Area of Interest tab show layers that directly intersect with your shape(s).

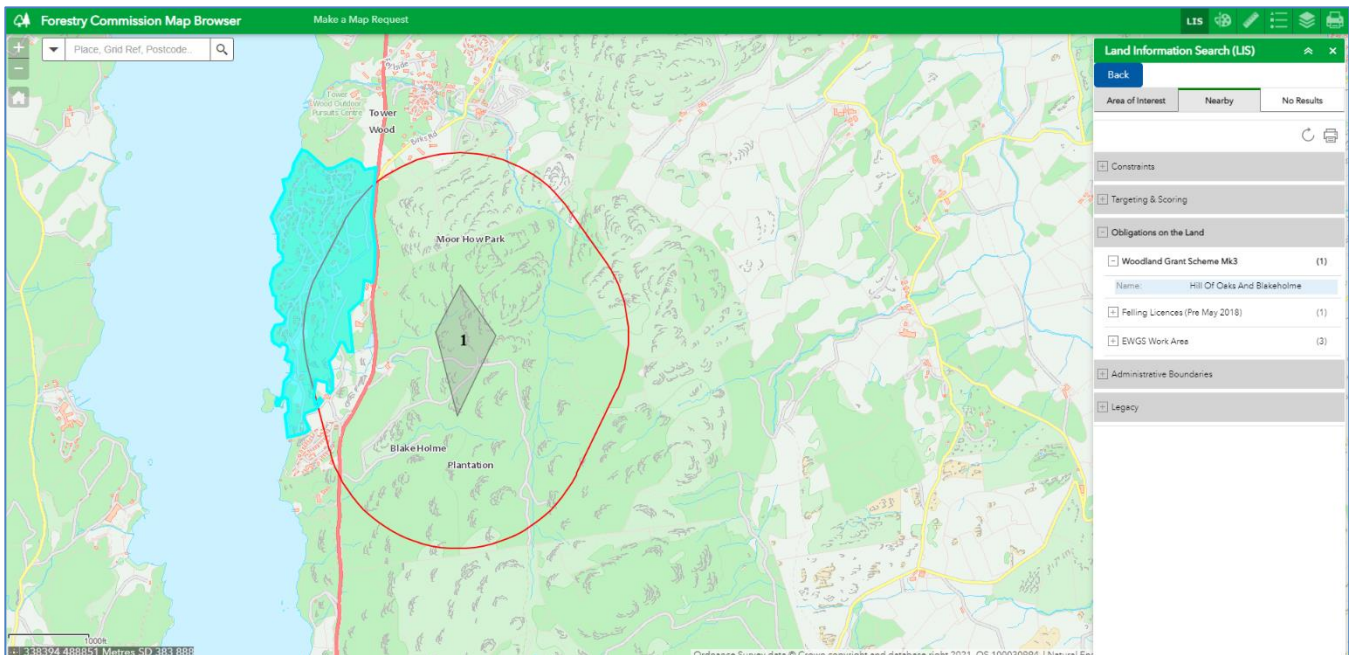
If you expand the layer category it will reveal what map layers are affecting your shape. If you click on the detail of a particular layer, a pale blue shading will identify the specific affected area, as shown below.



Nearby:

Results that appear under the Nearby tab show layers that do not intersect with your shape but do intersect with the 500-metre buffer.

Again, if you expand the layer category it will reveal what map layers are affecting your shape. If you click on the detail of a particular layer, a pale blue shading will identify the specific affected area, as shown below.



No Results:

The No Results tab lists the layers which have been used in the search, but which do not affect your shape or buffer zone at all.

Printing and saving the LIS report

To create a LIS report which you can print or save, click the grey print button on the LIS tab (this is not the green *Print* tool). This will open a LIS report in a new window. This new window may open behind your internet browser!

Depending on how big an area your LIS report covers, or how many parts there are to the LIS report, this may take a few minutes to load.

The LIS report is designed to fit standard A4 paper in portrait view.

The first page of the report will contain the map title you gave it, the OS Grid Reference and the Area in hectares, along with a small map showing the search area.

The LIS report itself will be laid out based on the order of features you drew.

- if you have 3 compartments, the report will show results for Cpt 1 first, then Cpt 2, followed by Cpt 3
- for each compartment, the LIS report will list the **Area of Interest** interactions first and then **Nearby** interactions. There will be a No Results list at the end of the report

Saving the PDF LIS report:

To save the LIS report as a PDF:

- right click on the web page window and select Print
- choose a suitable PDF print converter (such as CutePDF) from your print options, and press Print. You can choose where to save the PDF document, for example, on your PC or on a server

Once saved locally as a PDF, this can be printed off on paper using normal print functions.

If you don't have a PDF print function, you can use the **Save to PDF** button on the LIS report, but depending on your IT system or software, this may not always work.

Versions

Version 1 issued 5th December 2018 (first issue)

Version 1.1 issued 5th October September 2021

Annex A – Map layers catalogue

Constraints (36)

- Ramsar Sites
- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)
- World Heritage Site
- Areas of Outstanding Natural Beauty (AONBs)
- National Parks
- Heritage Coast
- Moorland Line
- Sites of Special Scientific Interest (SSSIs)
- Sites of Special Scientific Interest Units
- Priority Habitats
- Natural England Peat Map
- National Nature Reserves
- Local Nature Reserves
- Ancient Woodland
- Red Squirrel Reserves (Constraint)
- Scheduled Monuments
- Registered Battlefields
- Registered Parks and Gardens
- HS2 – Safeguarding Zones Phase 1
- HS2 – Safeguarding Zones Phase 2A
- HS2 – Safeguarding Zones Phase 2B
- CRoW 2000 Open Access Land
- CRoW 2000 – S4 Registered Common Land
- CRoW 2000 – Section 15 Land
- CROW S16 Dedicated Land
- OS Open Rivers Watercourse
- Flood Defences
- Flood Storage Area
- Phytophthora Ramorum Risk Zones
- Statutory Plant Health Notices – 3km buffer
- Woodland Carbon Code Projects

- Sustrans National Cycle Network
- Water – Water Quality – Acidification Risk

Targeting and scoring (35)

- CS HT Water – Water Quality Acidification (Silvicultural Transformation)
- CS HT Biodiversity - Woodland Improvement
- CS HT Biodiversity - Priority Species - Red squirrel - Woodland Management
- CS HT Biodiversity - Priority Habitat Proximity - Ancient Woodland
- W4W Less-than-good Quantitative Status
- CS HT Biodiversity - Priority Habitat Network
- CS WCM Biodiversity - Priority Habitat Network
- EWCO Biodiversity - Priority Habitat Network
- CS WCM Biodiversity - Priority Species - Red squirrel - Woodland Creation
- EWCO Biodiversity - Priority Species - Red squirrel - Woodland Creation
- CS WCM Biodiversity - Priority Species - Willow tit
- CS WCM Biodiversity - Priority Species - Black grouse
- CS HT Biodiversity - Priority Species - Woodland Bird Assemblage
- CS WCM Biodiversity - Priority Species - Woodland Bird Assemblage
- CS WCM Water - Flood Risk
- EWCO Water - Flood Risk
- CS WCM Water - Water Quality
- EWCO Water - Water Quality
- CS WCM Cross-cutting - Keeping Rivers Cool
- EWCO - Keeping Rivers Cool
- CS WCM Cross-cutting - Project Areas - Demonstration Test Catchment / Making Space for Water Demonstration Catchment
- CS WCM Cross-cutting - Nature Improvement Areas
- CS WCM Cross-cutting - Community Forest
- Community Forests (Eng)
- CS WCM Cross-cutting - Project Areas - Woodland for Water Priority Catchments
- EWCO - NfC Ammonia emissions capture for SSSI protection
- EWCO - NfC Social
- HS2 - Phase 1 25 mile buffer
- HS2 - Phase 2 25 mile buffer
- UTCF Trees Close to People

- UTCF Priority People
- UTCF Priority Places
- Low Risk Areas for Woodland Creation
- National Forest
- England NFI Map (2019)

Obligations on the Land (26)

- Dedications
- Felling Licences (Post May 2018)
- Felling Licences (Pre May 2018)
- Countryside Stewardship 2015 Case Boundary
- Countryside Stewardship 2015 Work Area
- EWGS Case Boundary
- EWGS Work Area
- FWPS Case
- FWPS Case Boundary
- FWPS Work Area
- Woodland Grant Scheme Mk1
- Woodland Grant Scheme Mk2
- Woodland Grant Scheme Mk3
- Environmental Stewardship
- Woodland Carbon Fund
- Woodland Creation Planning Grant
- CS Woodland Management Plans
- Unfunded Woodland Management Plans
- Forest Plans
- HS2 – Limits of Deviation (LoD)
- HS2 – Limits of Land to be Acquired or Used (LLAU)
- EIA Opinion Determination
- EIA Notification Assessment
- EIA Env Statement Decision
- FC Woodland Creation Data
- Energy Crop Scheme

Administrative Boundaries (8)

- Woodland Officer Boundaries

- Forest Services Areas
- Country Boundaries Generalised
- County Boundaries
- Unitary and District Boundaries
- Inner London Boroughs Boundary
- Forestry England Districts
- Forestry England Land (2019)

Legacy (8)

- CS Biodiversity – Priority Habitat Proximity – Broadleaved Woodland
- Felling Licence – Highways England
- W4W Less-than-good Quantitative Status 2012
- Woodland for Water
- Woodland for Water Project Areas
- Priority Places for England
- Woods close to people
- Walkers Welcome Woodland

Cumbria FIZ (10)

- FIZ – Forestry Investment Project Area
- FIZ _ Slope Adjacent to Riparian Corridor
- FIZ – Riparian Zone
- FIZ – Biodiversity of Verges
- FIZ – Biodiversity of Sectoral Information Systems
- FIZ – Biodiversity of Geology
- FIZ – Biodiversity of County Wildlife Sites
- FIZ – Archaeological Sites
- FIZ – Landscape Characteristics
- FIZ – Priority Habitats