

# Magic: Clearing the Waters for All User Guide

## Contents

Introduction .....	1
Launching the interactive map .....	1
Finding your area of interest.....	2
Finding layers relevant to 'Clearing the Waters for All' .....	5
Using site check to identify features within or near to an Activity .....	6
Measuring areas and distances .....	9
Help library .....	11

## Introduction

The habitat and protected area maps on Magic present information to help you assess the impact of your activity in an estuarine or coastal water body for the Water Framework Directive (WFD). It supports the [WFD assessment guidance for estuarine and coastal waters](#), known as 'Clearing the Waters for All', which is published on [www.gov.uk](http://www.gov.uk). Its main purpose is to provide information to support the scoping stage of a WFD assessment.

## Launching the interactive map

The Magic interactive mapping tool can be accessed in a number of ways. The first way is through the [WFD assessment guidance](#) on gov.uk which has a link to the [Magic interactive mapping tool](#).

The second way is through the [Water Body Summary Table](#). The water body name in column AE in the summary table links directly to that particular water body in Magic:

	A	B	C	D	AC	AD	AE
1	<b>Water Body Summary Table</b>						<b>Biology: higher and lower sensitivity habitat maps and protected area maps</b>
2							
3	<b>WFD water body name</b>	<b>WFD water body ID</b>	<b>River basin district name</b>	<b>Water body type</b>	<b>Subtidal rocky reef (ha)</b>	<b>Subtidal soft sediments (h)</b>	<b>Magic map link for each water body</b>
4	Adur	GB540704116000	South East	Estuarine	-	-	<a href="#">Adur</a>
5	Aide & Ore	GB520503503800	Anglian	Estuarine	-	320.56	<a href="#">Aide &amp; Ore</a>
6	Allhallows Marshes	GB560504016800	Thames	Estuarine	-	-	<a href="#">Allhallows Marshes</a>
7	Aln	GB510302203300	Northumbria	Estuarine	-	16.76	<a href="#">Aln</a>
8	Alt	GB531206908300	North West	Estuarine	-	-	<a href="#">Alt</a>
9	Arun	GB540704105000	South East	Estuarine	1.44	6.70	<a href="#">Arun</a>
10	Avon	GB510804606000	South West	Estuarine	-	-	<a href="#">Avon</a>
11	Axe	GB510804505400	South West	Estuarine	-	-	<a href="#">Axe</a>
12	Barnstaple Bay	GB610807680003	South West	Coastal	184.95	9280.57	<a href="#">Barnstaple Bay</a>
13	Barrow Clay Pits	GB560402916600	Humber	Estuarine	-	-	<a href="#">Barrow Clay Pits</a>
14	Beaulieu River	GB520704201400	South East	Estuarine	-	125.92	<a href="#">Beaulieu River</a>
15	Bembridge Harbour Lagoon	GB560710117000	South East	Estuarine	-	-	<a href="#">Bembridge Harbour Lagoon</a>
16	Benacre Broad	GB610050071000	Anglian	Coastal	-	-	<a href="#">Benacre Broad</a>
17	Black Water Lagoons	GB560704217200	South East	Estuarine	-	-	<a href="#">Black Water Lagoons</a>

The third way is through the [Magic homepage](#). From here, the tool can be launched in two ways:

1. Hover the mouse pointer over the 'Maps' box, at the top-right of the screen. From the drop-menu, select the 'Interactive Map' option:



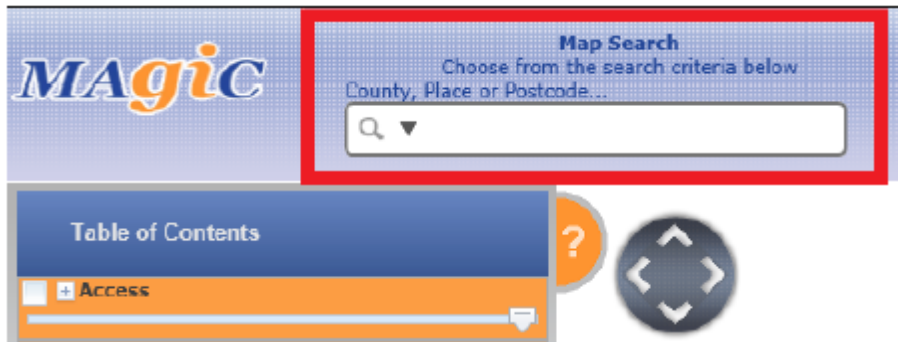
2. Simply click the large 'Get Started' button:




## Finding your area of interest

By clicking on the water body link in [Water Body Summary Table](#) the Interactive Mapper will automatically zoom to your chosen water body.

Otherwise you can use the Map Search tool. The Map Search tool is found at the top-left of the Interactive Map page:



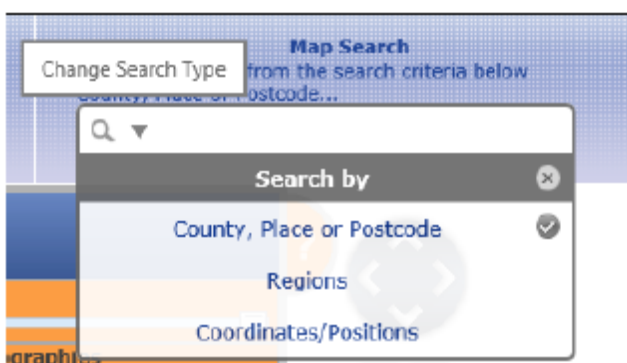
To perform a search, simply enter a search term and click the magnifying glass icon, to the left of the search field. The search will perform, and the map will navigate to display the search results.

For Regions, Counties and Postcodes a blue polygon will appear on the map for the selected area. For Coordinates/Positions a blue dot will appear. To remove the blue point or polygon from the map click on the Clear Selected Feature button  above the map.

There are 3 search types as follows:

1. The default search is County, Place or Postcode which allows you to search for any of the following (the search will automatically recognise, from the text you enter, whether it is a county, place or postcode):
  - a. Counties
  - b. Towns, cities, locations etc
  - c. Postcodes or postcode areas

NB: if you want to search by Region or Coordinates/Positions you will need to select the relevant data type by clicking the down arrow icon, on the left of the search field and selecting the relevant data type:



2. Regions: allows England regions to be searched (north east etc.)
3. Coordinates/Positions: allows coordinates and grid references to be searched for

The Coordinates/Positions search will support a number of different coordinate formats:

6 digit British National Grid in the format (only for OSGB36 projection):  
e.g. SX 123 456 (spaces optional)

Easting & Northing, metres (only for OSGB36 projection): e.g. 123456,  
234567 or 123456 234567 (, is optional)

Latitude Longitude pairs in any of the following formats (brackets are  
optional):

Degrees, Minutes & Decimal Seconds e.g N (50 49 7.21) W (4 7 1.223)

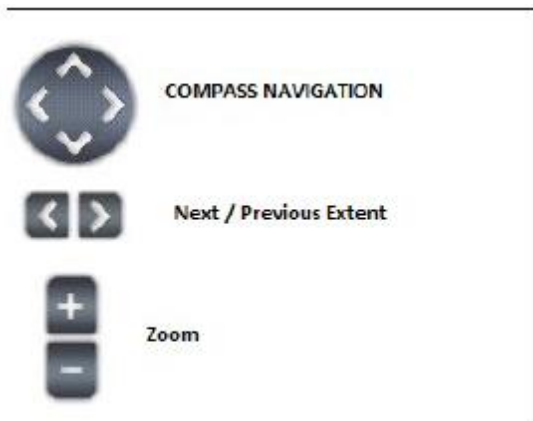
Degrees & Decimal minutes: e.g N (50 49.281) W (4 7.324)

Decimal degrees with NSEW signs e.g.N50.281 W 4.324

Decimal degrees with +- signs e.g 50.1234 -4.4567 OR -4.4567  
50.1234

Users can then also navigate the interactive map in 2 ways:

1. The navigation tools (as pictured) offers a number of options for navigation:



The top circle allows the map to be navigated in standard compass directions, by clicking the relevant arrow direction.

The middle arrows are for Previous Extent and Next Extent. Clicking these will move to the last, and the next successive view.

2. The Interactive Map can also be navigated with the mouse.
  - Scroll wheel will zoom in and out
  - Left click, hold and drag will manually pan around the map extent.

If needed, the **Where Am I Tool** can be used to help find the user's area of interest and its coordinates.

From the Feature Tool select the Where Am I? tool.

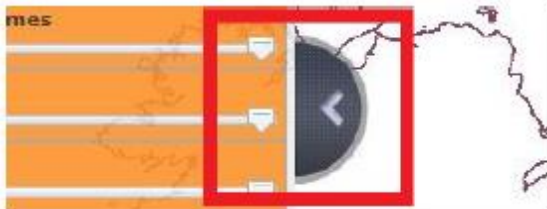


With the cursor, click on the point of interest on the map. A new window will then appear with coordinate information for the clicked point. The coordinate information listed is Easting & Northing, Grid reference, Latitude & Longitude, Postcode Area and National Grid Field Number.

### Finding layers relevant to 'Clearing the Waters for All'

To display the habitat and protected area layers on the map you need to use the Table of Contents (ToC).

To hide or unhide the ToC, click the arrow indicator (in the semi-circle) located to the right of the main ToC frame:



The Water Framework Directive (WFD): Clearing the Waters for All sub-theme can be found under the Marine theme:



The WFD sub-theme has 4 layers:

- WFD Estuarine and Coastal Water Bodies (England)
- WFD Protected Areas
- WFD Habitats: Higher Sensitivity
- WFD Habitats: Lower Sensitivity

Use the +- buttons to open each layer and the tick boxes to switch on and off each layer.



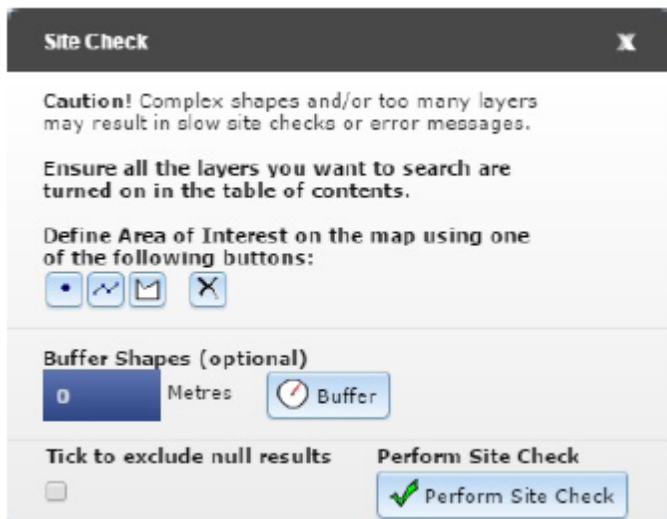
## Using site check to identify features within or near to an Activity




You can use the Site Check tool within the Feature Tools bar to define and draw the extent of your activity and check whether habitats are within 500m of your activity and whether protected areas are within 2km of your activity. Before you use the tool make sure all the necessary layers are switched on.

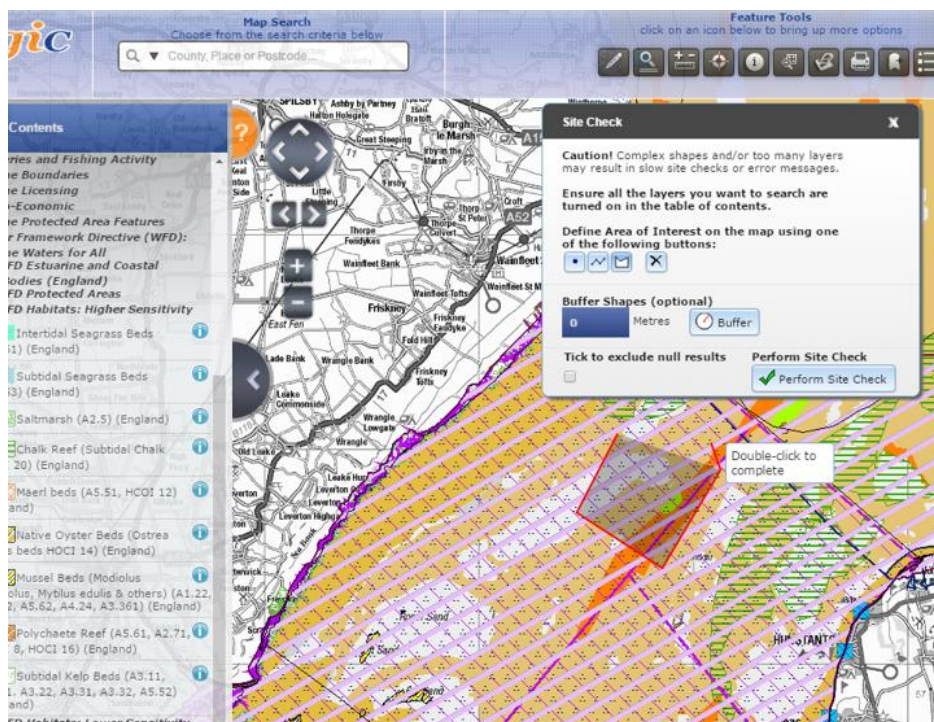
From the Feature Tools bar above the map select the Site Check button:




A new window will appear:



Use the specific point , line  or area (polygon)  drawing tools to define the footprint of your activity. Once a drawing tool is activated use 'left click' to mark the points or vertices of your area of activity. Then double-click to end your drawing. The coordinates of the cursor are shown at the bottom of the screen. These coordinates can be used to help draw the footprint of the activity.



Use the Buffer Shapes option to identify which features are within a set distance of your activity.

Click the Buffer button  once you have selected the buffer distance. At the scoping stage of a WFD assessment, 'Clearing the Waters for All' guidance requires you to:

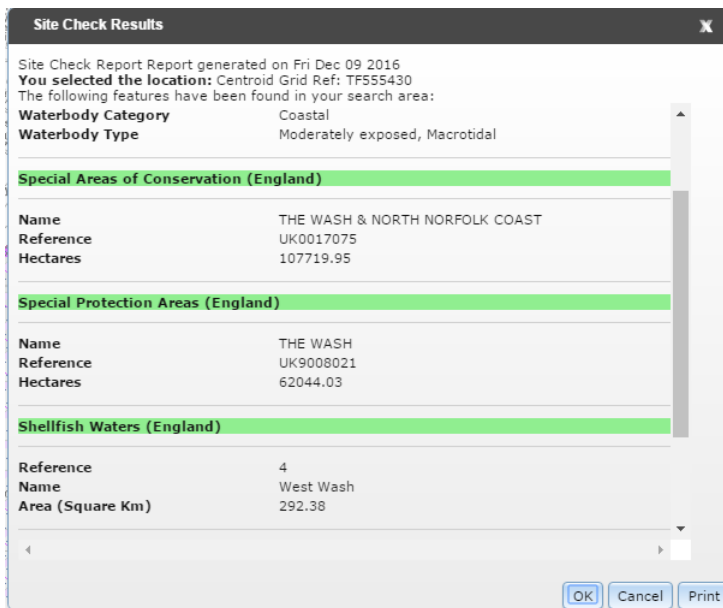
- identify any **higher sensitivity habitat within 500m** of your activity
- identify any **protected area within 2km (i.e. 2,000m)** of your activity

The Site Check tool therefore may need to be used more than once – making sure the appropriate layers are switched on/off and buffer limits are set to the correct distance - to obtain the correct information.

Tick the box to exclude null results. This excludes any habitat or feature not present in the defined area.

Once you have defined your activity footprint and buffer distance click the Perform

Site Check button  to generate the Site Check Results.



In the Site Check Results the entries highlighted in green indicate which type of feature (e.g. protected or habitat) is present. The feature name including attribute information is then listed under each green heading.

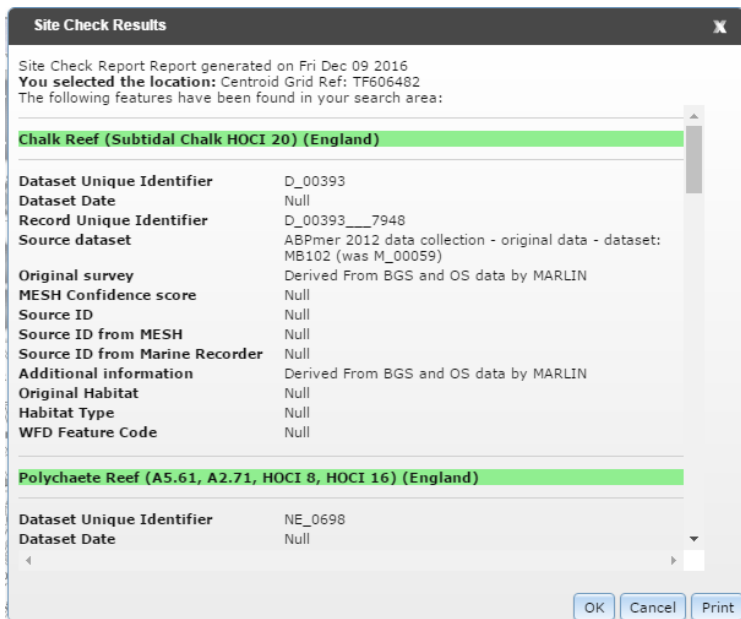
**NOTE – The 'hectare' figure given is the size of the whole feature. It is not necessarily the size of the feature within the Site Check search area.**

The Site Check Results for habitats includes attributes about the data source. Some key attributes include:

- Source dataset. A high level description of source dataset.
- Original Survey. Details of the original survey the data is derived from.
- MESH Confidence Score. Score between 0 and 100 denoting the confidence associated with the data.

The [EMODnet Seabed Habitat Portal](#) is a useful resource for finding further information about many survey datasets.





**NOTE - Multiple features of the same habitat type may be found and listed in the Site Check Results.**

Site Check reports can then be printed and saved in other file formats for your records. To save the results click 'Print' and set destination to 'Save as PDF'.

Users can click OK to close the results box.

The Clear Selected Feature tool can be used to clear Site Check points, lines or polygons once the site check has been performed.

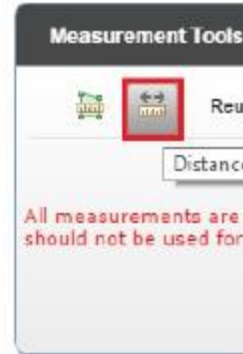
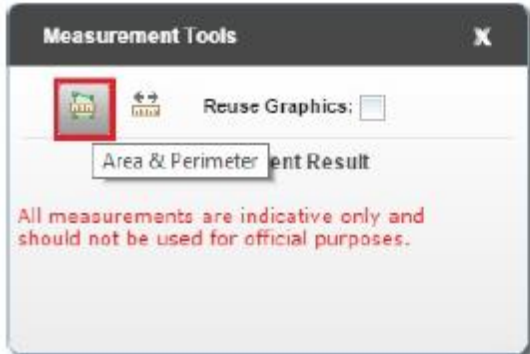


Users can use the 'Identify' button to click on a feature in the footprint/buffer area and learn more information about each feature.

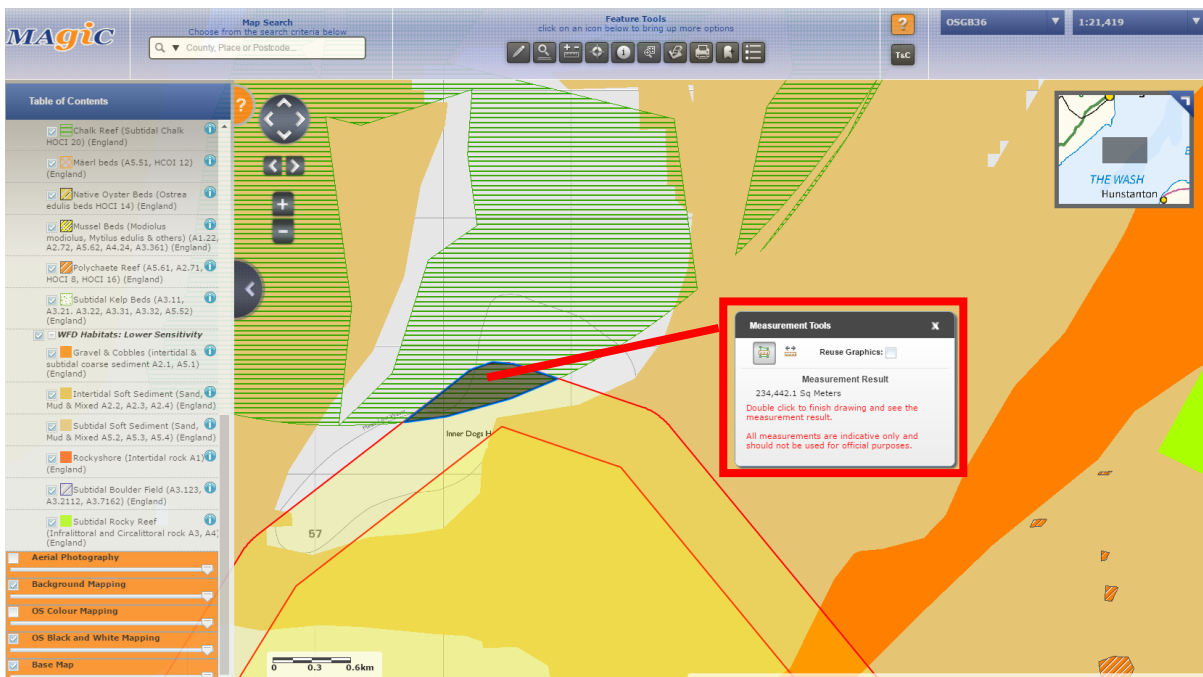


## Measuring areas and distances

To measure the size of habitats within the (buffered) footprint or the size of your (buffered) footprint you can use the Measurement Tools within the Feature Tools bar.



Use either the Area & Perimeter button or the Distance button to trace the footprint of your activity and each habitat area within it. Left click to mark vertices and double click to complete a drawing. Traced areas can also be exported as shapefiles.



**NOTE - The total area for each of the habitats identified within a WFD water body is listed in the [Water Body Summary Table](#).**

The measurement results can be obtained in different units.

The Clear Selected Feature tool can be used to clear measurement lines and polygons:



## Help library

Further guidance on how to use the Magic interactive mapping tool can be found through the [Magic Help Library](#).