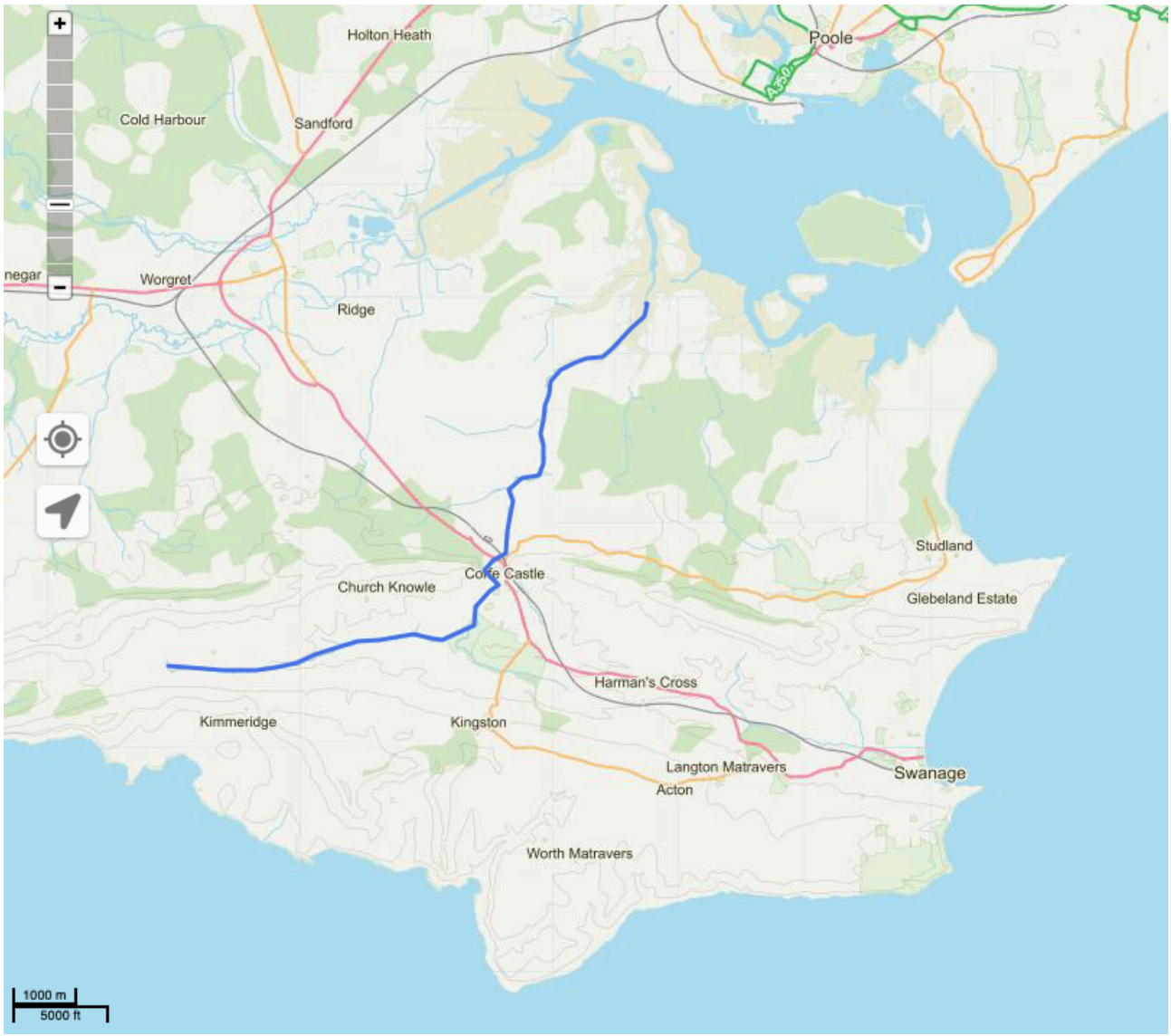


Online GCSE fieldwork skills course.

# The West Corfe River and floods- a virtual field study.




The West Corfe River has its source near the abandoned farm of North Egliston on the Lulworth Army training ranges. If you were allowed to get to the source and walk westwards you would reach the sea near Kimmeridge Bay in just over 1.5km, but the West Corfe River heads eastwards and travels for 11km to its mouth in Poole Harbour.

The West Corfe River is prone to flooding and our study today will investigate

“How and why the characteristics of the drainage basin and channel influence the flood risk to people and property along the rivers course”

We will be undertaking primary data collection to measure the channel characteristics and using secondary data sources to learn about the drainage basin characteristics.

Map of the drainage basin:

We will add the location of our 4 field study sites and annotate the map with characteristics that can influence flood risk.

West Corfe River field study locations

| Site number | Grid reference |
|---|---|
| **1** | **SY 913 805** |
| **2** | **SY 943 812** |
| **3** | **SY 957 822** |
| **4** | **SY 967 855** |

List of the sources of secondary data that we used to annotate the map.

Notes on how we chose our 4 field study sites.

**Photographs activity.**

You will be given a set of 4 photographs that show each of our sites along the West Corfe River.

Can you put them into the correct order, from site 1 nearest the source to site 4 nearest the mouth?

**Predictions activity.**

The next task is to make some predictions about how the West Corfe River will change from site 1, near the source, to site 4, close to the mouth.

One has been done for you already:

The West Corfe River will get wider from site 1 to site 4.

**Testing your predictions using data from fieldwork.**

In order to test your predictions you will need data from fieldwork.

You will have already watched the video “How to measure a river with Barry and Ben, The Geography Men”.

This video shows you the fieldwork methods that you would use to measure the :-

a) width of the river,

b) depth in a number of places across the river,

and

c) the velocity (speed) of the water in the river in a number of places across the river.

You will be given these measurements and you can use the data and the results to test some of your predictions.

**How to use the fieldwork data to test your predictions.**

Notes on the maths that you need to use.

**Using ARCGIS to present and analyse our field data.**

**Linking the characteristics of the drainage basin and the river channel to flood risk.**

**Evaluating our methods.**

**Extension activity studying the bedload data.**