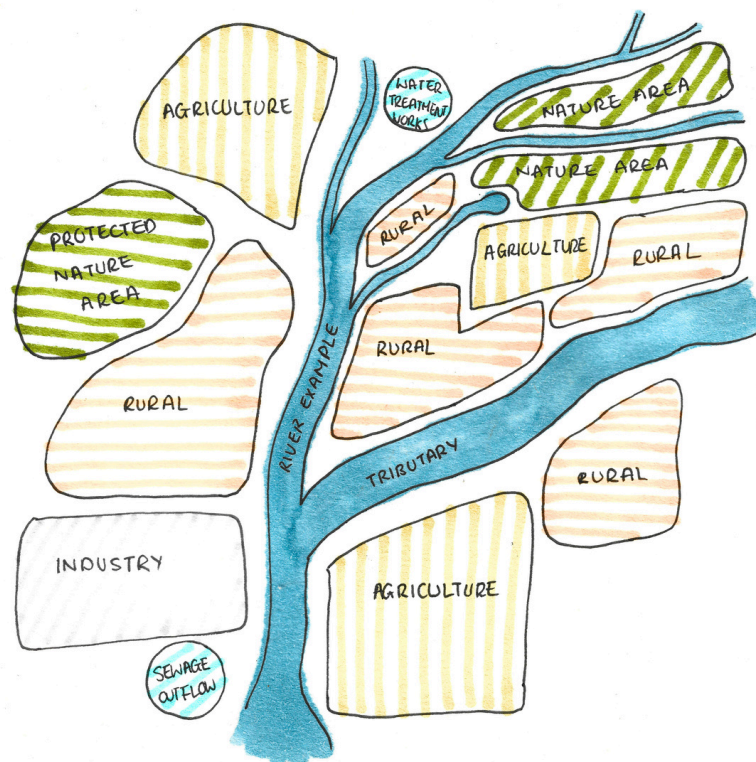


2

OPTION 3 - Stretch Activity - Research your catchment

If you'd like to set your learners some more independent learning, this task is a great way to get them researching and thinking for themselves. Supply the learners with links to the maps on the worksheet on the next page. Give them time to research the land use, river flow, storm overflow and protected nature areas in their local catchment.

To compile their research, instruct the learners to create a simplified diagram of their catchment as the example shown here:



Make it clear that they are to categorise their findings into the following areas: Agriculture, Rural, Industrial, Protected areas/nature and add any water treatment works noticed to keep it simple. Instructions for using the maps are on the worksheet below.

After mapping their catchment, there is opportunity here to discuss their findings.

- Are there any areas that seem problematic for river health?
- If you were to make your perfect river catchment, what changes might you make?



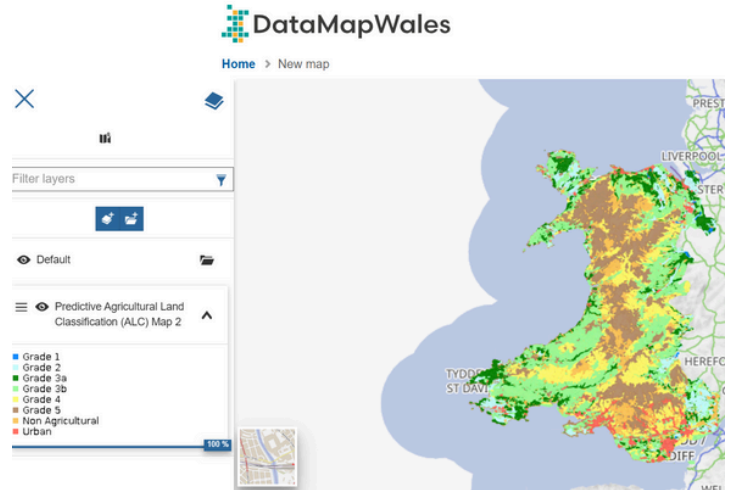
WORKSHEET - Research your catchment

Use the links below to explore different map databases. These maps will help you map out the urban areas, river route, agriculture land use and protected nature areas.

Agriculture Land Use:

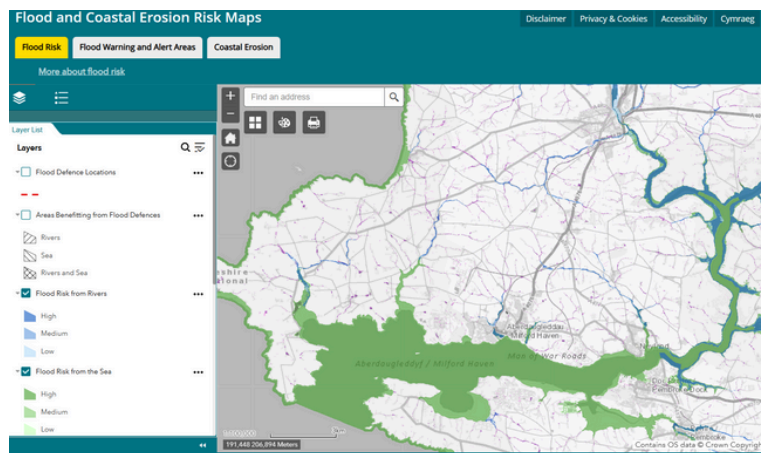
Data Map Wales - Agricultural land classification: predictive map
https://datamap.gov.wales/maps/new?layer=inspire-wg.wg_predictive_alc2#/

This map shows urban areas and grades the suitability of land for agriculture. This will help you get a broad overview of land-use in your catchment.

**Flood Risk Areas:**

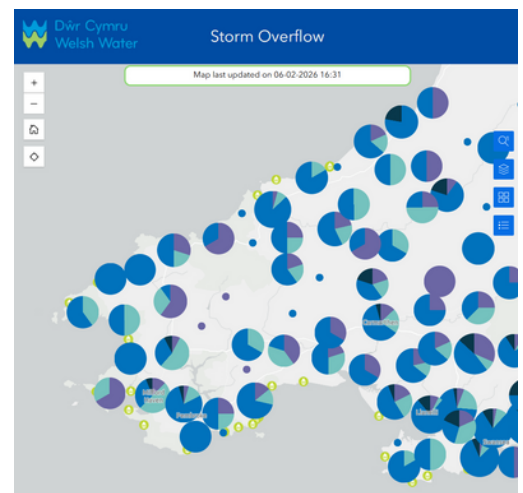
Flood and Coastal Erosion Risk Maps -
<https://flood-risk-maps.naturalresources.wales/?locale=en>

Use this map to explore the route of your local river. Notice the areas that are of higher flood risk - what exists in these zones?

**Water Treatment Works:**

Storm Overflow Map -
<https://corporate.dwrcymru.com/en/community/environment/storm-overflow-map>

This map shows the location of storm overflows. Storm overflows are part of the sewage treatment works and dispose of the waste water into our rivers and seas. When we have lots of rainfall they release more water to help prevent flooding, but this can mean that un-treated sewage is released into our rivers.





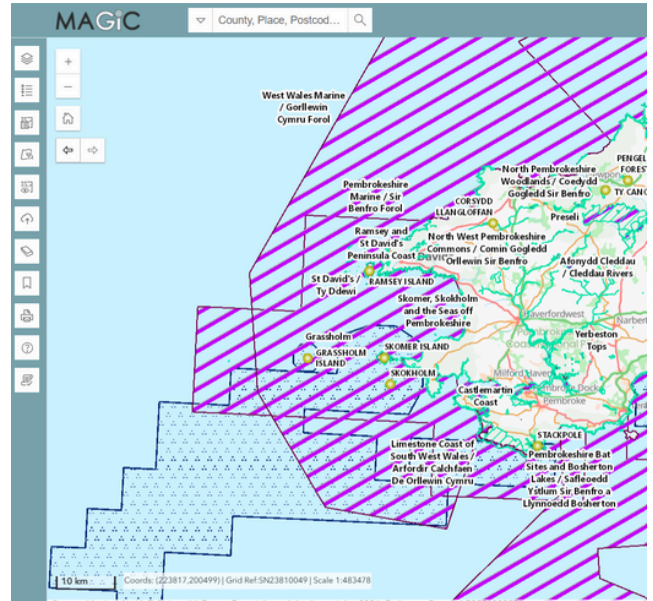
MAGIC Map:

Interactive Map - <https://magic.defra.gov.uk/>

This map will show you all the protected areas -you'll just need to add some filters first. After opening the map you'll need to use the 'search for layer' tool on the left to search and add the following layers:

- Special Area of Conservation
- Sites of Scientific Interest
- Special Protection Areas

Click all that apply. Alternatively type 'Wales' in the search for layer tool bar and click all that apply.



Then zoom into your catchment. Use the map 'legend' to distinguish between protected areas and other sites.

Google Maps/ Google Earth

Google Maps - <https://www.google.co.uk/maps>

Great satellite imagery to help you piece together your catchment!

Create your map

Use the research you've found from the maps to create your catchment map. Keep it simple, outlining the areas that fall under the following categories:

- Urban Areas
- Water treatment works
- Agriculture
- Industry
- Protected nature

Draw your river first and then add in the sections covered by each other land use.

