

# AIMS Defence (Spatial Flood Defences)

## Product Description

Nov  
2021

### DESCRIPTION OF DATASET

The Environment Agency releases a range of flood asset information as Open Data. They are the only comprehensive and up-to-date group of datasets in England that show flood defences currently owned, managed or inspected by the EA.

The Open Data asset types are listed below. This product description relates to the highlighted asset type.

- Aids to Navigation
- Beach Structure
- Building & Compounds
- Channel Crossing
- Channel
- Defence (Spatial Flood Defences)
- Instrument
- Land
- Structure

Flood defences can be structures, buildings or parts of buildings. Typically, these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

A defence is any asset that provides flood defence or coastal protection functions. This includes both man-made and natural defences. Natural defences may include man-made elements to make them more effective or protect them from erosion.

Normally several assets will be used together to manage the risk in a particular area, working in combination within a risk management system.

### PURPOSE

The dataset shows the location and metadata about our linear Defences. We combine it with other data in our flood models to help us better understand flood risk (e.g. Risk of Flooding from Rivers and Sea product). It is also used for Incident Management purposes.

The data is used outside the EA by insurance companies to help provide home insurance cover. It is also used in homebuyers reports when purchasing a new house.

### BACKGROUND

- Digitised from scheme drawings and survey information on Ordnance Survey mapping (at a scale of 1:3000 or less)
- Recorded in our Asset Information Management System (AIMS: OM, called AIMS hereon)
- Managed and maintained by local experts

### DATASET DETAILS

All assets on main river and around the coast are selected from AIMS where the following apply:

- EA has operational powers to maintain or operate (whether we exercise those powers).
- There is a liability on Flood and Coastal Risk Management (FCRM).
- Should be attached to Flood Risk Management Systems (FRMS).

This includes:

- Assets we may operate for FCRM in an incident.
- Assets used to protect the coast from erosion or provide access.

Explanation of 'Condition Grades'

- 1 - Very Good - Cosmetic defects that will have no effect on performance
- 2 - Good - Minor defects that will not reduce the overall performance of the asset
- 3 - Fair - Defects that could reduce performance of the asset
- 4 - Poor - Defects that would significantly reduce the performance of the asset. Further investigation needed
- 5 - Very Poor - Severe defects resulting in complete performance failure

Explanation of spatial data 'Quality Flags':

- 1 = Good
- 2 = Adequate
- 3 = Suspect
- 4 = Poor
- 5 = Missing
- 0 / 6 = Unchecked

## USING THE PRODUCT

Key Strengths	<ul style="list-style-type: none"> <li>• Local data (defence information including condition) and expert validation</li> <li>• High quality information on asset properties (e.g. asset type, crest level etc)</li> <li>• National (England) coverage</li> <li>• Regularly updated where new data is available.</li> </ul>
Key Limitations	<ul style="list-style-type: none"> <li>• Does not contain all AIMS defences, such as:               <ul style="list-style-type: none"> <li>- non-main river assets.</li> <li>- coastal protection assets/schemes that another operating authority is responsible for.</li> <li>- assets solely funded by non FCRM (EA) funding streams with no FCRM purpose.</li> </ul> </li> </ul>
Companion Datasets	<ul style="list-style-type: none"> <li>Aids to Navigation</li> <li>Building &amp; Compounds</li> <li>Channel Crossing</li> <li>Channel</li> <li>Instrument</li> <li>Land</li> <li>Structure</li> </ul>

## DATA ACCESS

This is a spatial dataset that is available in two locations as either a national download at the direct link below (formats: shp, gml, mid/mif, geojson, tab or gdb) or via a [map](#) interface as Linked Data (API). It can be downloaded and used for free with an Open Government Licence.

- Direct link <https://data.gov.uk/dataset/cc76738e-fc17-49f9-a216-977c61858dda/aims-spatial-flood-defences-inc-standardised-attributes>
- If you would like a product sample or to find out more, please contact [data.info@environment-agency.gov.uk](mailto:data.info@environment-agency.gov.uk)

Approval for Access number	AfA345
EA Metadata Identifier	8e5be50f-d465-11e4-ba9a-f0def148f590
National Custodian	Karen Alford (FCRM Manager)

## IMPROVEMENTS / UPDATE FREQUENCY

The data is subject to continual improvement through; updated spatial accuracy, increased completeness and improved attribute data quality.

As the EA builds new flood defences or updates existing ones, the dataset will be refreshed. Updates to the dataset are published quarterly (month and year are published in the file name) on [www.data.gov.uk](http://www.data.gov.uk) and users are strongly advised to ensure they are referring to the most current version.

# Data Schema

Table Name		
Defence		
<a href="https://environment.data.gov.uk/asset-management/dri-app/asset-types">https://environment.data.gov.uk/asset-management/dri-app/asset-types</a>		
1	shape	Shape
2	asset_id	Asset ID
3	asset_name	Asset Name
4	asset_sub_type	Asset Sub Type
5	primary_purpose	Primary Purpose
6	alternative_purpose_1	Alternative Purpose 1
7	alternative_purpose_2	Alternative Purpose 2
8	asset_length	Asset Length
9	toe_level	Toe Level
10	protection_type	Protection Type
11	asset_maintainer	Asset Maintainer
12	asset_operator	Asset Operator
13	asset_owner	Asset Owner
14	current_condition	Current Condition
15	target_condition	Target Condition
16	current_sop	Current Standard of Protection
17	current_sop_date	Current Standard of Protection Date
18	design_sop	Design Standard of Protection
19	design_sop_dqf	Design Standard of Protection Data Quality Flag
20	design_ucl	Design Upstream Crest Level
21	year_last_refurbished	Year Last Refurbished
22	last_inspection_date	Last Inspection Date
23	next_inspection_date	Next Inspection Date
24	asset_start_date	Asset Start Date
25	actual_dcl	Actual Downstream Crest Level
26	actual_dcl_dqf	Actual Downstream Crest Level Data Quality Flag
27	actual_ucl	Actual Upstream Crest Level
28	actual_ucl_dqf	Actual Upstream Crest Level Data Quality Flag
29	design_dcl	Design Downstream Crest Level
30	bank	Bank
31	effective_cl	Effective Crest Level
32	effective_cl_dqf	Effective Crest Level Data Quality Flag
33	include_in_flood_map	Include in Flood Map
34	water_management_area	Water Management Area
35	local_authority	Local Authority

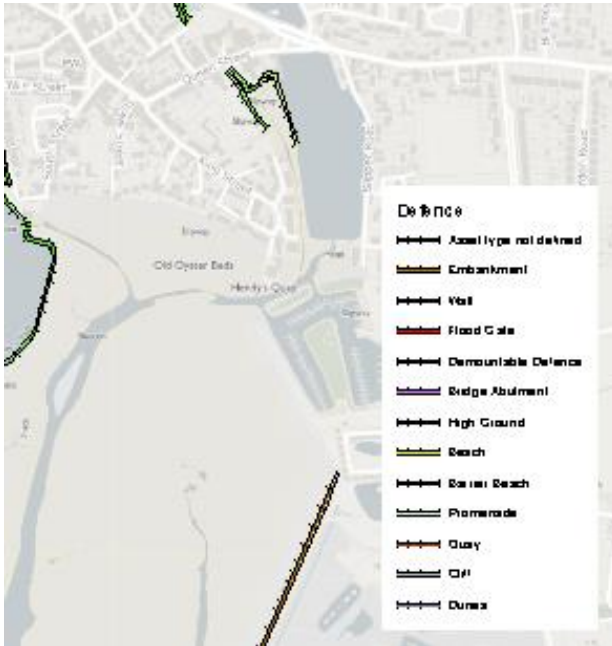
customer service line  
03708 506 506

incident hotline  
0800 80 70 60

floodline  
0345 988 1188  
0845 988 1188

[www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

## Example of data (using GIS)



Note - base mapping is not included with product.

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