

AIMS Aids to Navigation

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
- 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 manmade 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 Aids to Navigation assets. 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).
- · It is 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	 Local data (defence information including condition) and expert validation High quality information on asset properties (e.g. asset type, crest level etc) National (England) coverage Regularly updated where new data is available. 		
Key Limitations	 Does not contain all AIMS defences, such as: non-main river assets. coastal protection assets/schemes that another operating authority is responsible for; assets solely funded by non FCRM (EA) funding streams with no FCRM purpose. 		
Companion Datasets	Beach Structure Building & Compounds Channel Crossing Channel Defence (Spatial Flood Defences) Instrument Land		

Structure

DATA ACCESS

This is a spatial dataset that is available in two locations as either a national download from 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/70817bda-9c68-4f27-8d7a-9b8458e30d67/aims-aids-to-navigation
- If you would like a product sample or to find out more, please contact <u>licence-advice@environment-agency.gov.uk</u>

Approval for Access number	AfA345
EA Metadata Identifier	d94b1866-b001-4a53-bb91-4016d05b48b8
National Custodian	Karen Alford (FCRM Manager)

IMPROVEMENTS / UPDATE FREQUENCY

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

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 and users are strongly advised to ensure they are referring to the most current version.

Data Schema

Table Name

Aid to Navigation				
https://environment.data.gov.uk/asset-management/drl-				
app/asset-types				
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	protection_type	Protection Type		
9	asset_maintainer	Asset Maintainer		
10	asset_operator	Asset Operator		
11	asset_owner	Asset Owner		
12	current_condition	Current Condition		
13	target_condition	Target Condition		
14	year_last_refurbished	Year Last Refurbished		
15	last_inspection_date	Last Inspection Date		
16	next_inspection_date	Next Inspection Date		
17	asset_start_date	Asset Start Date		
18	water_management_area	Water Management Area		
19	local_authority	Local Authority		
20	frms_code	Flood Risk Management System Code		

Example of data (using GIS)



Note - base mapping is not included with product.

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