

## **AIMS Channel**

## **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
- Buildings & 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 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 Channel Crossings. 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> <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> <li>Does not contain all AIMS defences, such as:         <ul> <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> <li>Only contains defences owned, managed or inspected by EA</li> </ul>		
Companion Datasets	Aids to Navigation  Beach Structure  Building & Compounds  Channel Crossing  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 at the direct link below (formats: shp, gml, mid/mif, geojson, tab or gdb) or via a <u>map</u> 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/b9d1e95e-0e83-4e30-baf7-1942598f9cea/aims-channel
- If you would like a product sample or to find out more, please contact <a href="mailto:data.info@environment-agency.gov.uk">data.info@environment-agency.gov.uk</a>

Approval for Access number	AfA345
EA Metadata Identifier	0e7b2e11-2331-4c07-b373-f0f601e15b3b
National Custodian	Karen Alford (FCRM Manager)

### IMPROVEMENTS / UPDATE FREQUENCY

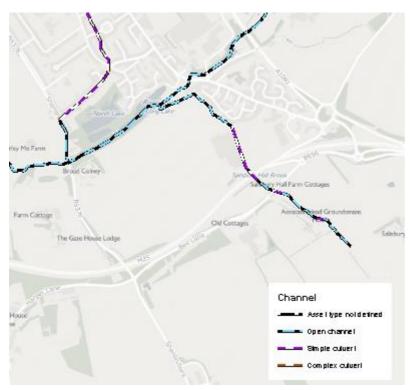
The data is subject to continual improvement through; updated spatial accuracy, increased completeness and improved attribute data quality.

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 <a href="www.data.gov.uk">www.data.gov.uk</a> and users are strongly advised to ensure they are referring to the most current version.

## **Data Schema**

Table Name				
Channel				
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	asset_length	Asset Length		
9	protection_type	Protection Type		
10	asset_maintainer	Asset Maintainer		
11	asset_operator	Asset Operator		
12	asset_owner	Asset Owner		
13	current_condition	Current Condition		
14	target_condition	Target Condition		
15	current_sop	Current Standard of Protection		
16	current_sop_date	Current Standard of Protection Date		
17	design_sop	Design Standard of Protection		
18	design_sop_dqf	Design Standard of Protection Data Quality Flag		
19	year_last_refurbished	Year Last Refurbished		
20	last_inspection_date	Last Inspection Date		
21	next_inspection_date	Next Inspection Date		
22	asset_start_date	Asset Start Date		
23	water_management_area	Water Management Area		
24	local_authority	Local Authority		
25	latest_culvert_inspection_date	Latest Culvert Inspection Date		
26	date_of_next_culvert_inspection	Date of Next Culvert Inspection		
27	frms_code	Flood Risk Management System Code		

# **Example of data (using GIS)**



Note - base mapping is not included with product.

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