Flood and Coastal Risk Management (FCRM) 5yr Maintenance Programme

Product Description

November 2020

DESCRIPTION OF DATASET

Shows the planned work for maintenance of channels, flood defences and structures on main river and the coast carried out by the Environment Agency to reduce flooding in England. The programme will be updated quarterly.

The programme shows the current funded year together with expected maintenance needs for the following 4 years. The programme also shows completed maintenance activities for years 2018/19 onwards

Examples of maintenance activities (see also appendix a) in the programme are:

- maintaining flood barriers and pumping stations
- clearing grills and removing obstructions from rivers
- · controlling aquatic weed in rivers
- managing grass, trees and bushes on flood embankments orrepairing flood defence structures
- currently not all maintenance activity on our operating structures such as pumping stations, automatic gates and sluices is shown. Asset inspection programmes also are not included.

The future 4 year programmes include two maintenance types:

Frequent maintenance - regular routine activity carried out one or more times per year e.g. grasscutting carried forward into each future year.

Intermittent maintenance - Works carried out less than once per year. By its nature intermittent work is less predictable into the future and so the programmes give the current view of work we wish to undertake, however, higher priority needs may come to light over time and delay or displace the activities.

PURPOSE

The asset maintenance programme is an important part of the Flood and Coastal Erosion Risk Management (FCERM) Strategy for England. It is required because we need to prioritise investment of public money where the risk of flooding, risk to life and economic damage are greatest.

At some locations, the financial cost of maintaining an asset outweighs the benefits provided by our work. In these cases, we cannot justify further investment and cannot continue with some activities we may have previously carried out.

Each year we prepare a new revenue maintenance programme. We use FCERM revenue Grant In Aid to maintain flood risk assets. The maintenance programme ensures that flood risk assets provide the required standard of service, for example to keep assets ready to operate and structurally sound to prevent failure.

The Environment Agency consults with Natural England and the Environment Agency fisheries, recreation and biodiversity teams to ensure we consider the environment when undertaking maintenance activities. We also share this information with Regional Flood and Coastal Committees and other partners.

BACKGROUND

- Used to target resources to areas at highest risk and provide evidence behind our funding bids to DEFRA.
- Data originates from our Asset Information Management System (AIMS), AIMS:Planning (AIMSp)
- Enables planning and prioritisation of maintenance activity at asset level leading to more effective and efficient asset maintenance.
- Describes to stakeholders why, where and when we undertake maintenance work, and we will be able to demonstrate 'value for money'.
- · Managed and maintained by local experts

DATASET DETAILS

Viewable on a map - https://environment.data.gov.uk/asset-management/index.html

Enter your postcode, or zoom to a location using the mapping tools to find out what type of maintenance activities the Environment Agency may do near you and when it is planned to take place.

View the current year, or subsequent 4 years.

Accessible via API - https://environment.data.gov.uk/asset-management/doc/reference

There are various API links available and offer both JSON and HTML views of the data. Note that the HTML views are offered as an aid to debugging and development, they are not intended for presentation to consumers. All URIs are relative to the service base URI of http://environment.data.gov.uk/asset-management.

The table below provides a brief summary of the APIs available.

What	API	Parameters
List assets	id/asset	assetType={type} assetSubType={type} primaryPurpose={value} protection- type={value} search={label-text} _view=default full lat=y&long=x&dist=dkm
	[json] [html]	
Details on a single asset	id/asset/{id}	
	[json] [html]	
List maintenance activities	id/maintenance- activity	maintainedAsset={asset} activityType={type} activitySubType={type} westminsterConstituency={oscode}
	[json] [html]	
List maintenance activities related to a particular asset	id/asset/{id}/mainten ance-activity	
	[json] [html]	
Details on a single activity	id/maintenance- activity/{id}	
	[json] [html]	

USING THE PRODUCT

Key	Single source of EA FCERM annual maintenance programme	
Strengths	Searchable using postcode or via the map	
	National (England) coverage	
	Updated quarterly	
Key	Only contains defences owned, managed or inspected by EA	
Limitations	 In-year work may change due to adverse weather, floods, or other operational and environmental considerations and as such won't be reflected in the maintenance programme. 	
Companion	Spatial Flood Defences	
Datasets	Asset Management Capital Programme	

DATA ACCESS

It can be downloaded free with an Open Government Licence as Open Data from www.data.gov.uk.

- Direct link https://environment.data.gov.uk/asset-management/index.html
- If you would like a product sample or to find out more please contact data.info@environment-agency.gov.uk

Approval for Access number	AfA 511
EA Metadata Identifier	defbc673-c3f7-4164-967f-a765f83db65e
National Custodian	Dave Denness (FCRM Manager)

IMPROVEMENTS / UPDATE FREQUENCY

The Environment Agency makes every effort to ensure the maintenance programme is current. However, sometimes work may not go ahead at the stated time due to adverse weather, floods, or other operational and environmental considerations.

Updates to the dataset are published quarterly users are strongly advised to ensure they are referring to the most current version.

Appendix a

The maintenance work the Environment Agency may carry out includes...

CHANNELS



Some plants and animal species are not native to the UK and spread quickly, grow rapidly and completely take over a whole area in a short space of time blocking watercourses.



We may need to increase or decrease the ability of a river conveying water depending on the benefits. We can use a number of different approaches and activities such as managing the vegetation within the channel.

RAISED DEFENCES



Flood defences along a water course provide increased capacity to convey flood waters. We maintain and inspect them to ensure that they perform how they were designed and that the channel capacity is maintained.

STRUCTURES



Flood defence structures include walls made from stone, brick, concrete, glass, and timber. We maintain and inspect them to ensure that they perform how they were designed.

OPERATION & OPERABILITY



In high flood risk areas, working with local communities we erect temporary barrier at pre-determined locations to provide protection to property and key infrastructure.



Inspecting and testing - We keep a record of the condition of all flood defences. This may be through routine inspections or in response to a call from a member of the public.

Keeping the river clear of blockages – removal of man-made obstructions such as shopping trolleys, or natural obstructions such as fallen trees or overhanging branches and weed. We assess the flood risk before we consider removal of any blockage.

ASSETS MEICA



In managing flood risk, we maintain and operate many Mechanical, Electrical, Instrumenation, Control and Automation (MEICA) assets, including pump stations, barrier structures and control structures to manage water flow and water storage capacity. The largest structure that we own and operate is the Thames Barrier.

Maintenance Activities include:

MAINTENANCE ACTIVITY	CODE
Concrete/masonry repair	MCMR
Confined space CCTV	CCTV
Confined space Man Entry	MANE
Debris/Obstruction remove	ОВ
Dredging	Dg
Embankment Repairs	ER
Grass Cut (by hand)	GH
Grass Cut (by machine)	GM
Grass Cut 2 (by machine)	GM2
Grass Cut 3 (by machine)	GM3
Grass Cut Additional (by machine)	GM4
Groyne Repair	GR
Health & Safety Grasscut	HSC

Invasive species control Floating Pennywort	FPW
Invasive species control Giant Hogweed	GHW
Invasive species control Himalayan Balsam	HLB
Invasive species controlJapanese Knotweed	JKW
Invasive species control Parrots Feather	PTF
Invasive species control Water Primrose	WPR
Maintain access to asset	MAA
Maintenance Check	MC
Mechanical, Electrical, Instrumenatation, Control, Automation asset	MEICA
MEICA - Buildings/Grounds	MEREL
MEICA - Energy	MEENE
MEICA - Maintenance	MEM
MEICA - Operation	MEOP
MEICA - Planned preventative maintenace	MEPPM
Month of year	MO
Operational check	OC
Painting	PAINT
Public safety Fencing	PSRAF
Public safety Inspection	PSRA
Public safety Other	PSRAO
Public safety Signage	PSRAS
Public safety Treework	PSRAT
Repair of Fencing	RF
Repair vandalism damage	Vand
Repairs - Animal Poaching	REPOA
Repairs-Burrowing Animals	REBUR
Replacement of signs	RS
Reprofilling	Repro
Reservoir Insp Section10	RES10
Reservoir Insp Section12	RES12

Revetment/Erosion Repairs	RER
Screen replacement/repair	SR
Sealant replace/repair	SRR
Servicing	SE
Structure/Ground Con Insp	SGCI
Topographical Surveys	TS
Tree Work	TW
Vermin control	VC
Weed Cut (by hand)	WH
Weed Cut (by machine)	WM
Weed Cut Additional (by machine)	WC2
Weed Spraying (not invasive)	WS

Appendix C

Maintenance data schema (current year programme)

ATTRIBUTE	DESCRIPTION
AssetID	Unique reference code per asset
Asset Sub-Type	The Sub-Type of the asset
AssetName	Asset Sub-Type together with Asset ID
AssetURL	Unique web address for asset
ActivityType	Type of maintenance undertaken on the asset
ActivitySubType	Sub Type of maintenance undertaken on the asset
ActivityID	Unique code based on Activity Sub Type
PlannedStartMonth	Planned month maintenance will start
PlannedStartQuarter	Planned quarter maintenance will start
PlannedFinishMonth	Planned month maintenance will finish
PlannedFinishQuarter	Planned quarter maintenance will finish
ActualStartMonth	Actual month maintenance started
ActualStartQuarter	Actual quarter maintenance started
ActualFinishMonth	Actual month maintenance finished
ActualFinishQuarter	Actual quarter maintenance finished
ActivityStatus	Frequency of activity, either 'Frequent' or 'Intermittent'
ProgrammeName	Name of Environment Agency local maintenance programme
Area	Environment Agency Area name
RFCC	Regional Flood & Coastal Committee
WestminsterConstituency	The areas used to elect Members of Parliament to the House of Commons

Maintenance data schema (future programme)

ATTRIBUTE	DESCRIPTION
AssetID	Unique reference code per asset
AssetName	Asset Sub-Type together with Asset ID
AssetURL	Unique web address for asset
ActivityType	Type of maintenance undertaken on the asset
ActivitySubType	Sub Type of maintenance undertaken on the asset
PlannedFinishMonth	Planned month maintenance will finish
PlannedFinishQuarter	Planned quarter maintenance will finish
Status	Frequency of activity, either 'Frequent' or 'Intermittent'
Team	Environment Agency team Asset Performance team
Area	Environment Agency Area name