Reservoir Flood Maps – Spatial Data (AfA180)

Description

Description of information: As the result of the Water Act 2003, responsibility for reservoir safety in England and Wales was transferred to the Environment Agency (EA). As the new enforcement authority, the Environment Agency is responsible for assuring the safety of the nation's approximately 2,100 reservoirs by enforcing the Reservoirs Act 1975. Simplified inundation mapping was carried out nationally by the Environment Agency to provide a baseline assessment of all reservoirs falling within the Act. Reservoirs Flood Maps – Spatial Data are referred to externally as Risk of Flooding from Reservoirs.

The detailed outputs show the potential flood risk if reservoirs were breached. The models were created at various resolutions ranging from 10 metre cells through to 50 metre squares for locations furthest away from the breach. These files are not available as a single, discrete file since each reservoir has been modelled individually.

It should be noted that these model out puts are for emergency planning purposes and are not intended to reflect the most detailed flood extents. As such these data show the absolute maximum flood where there is likely to be an impact.

Issues to Note
Security markings have been inconsistently applied to the various data layers. These data are not approved for access due to fixed images generated using these data having been protectively marked.

AfA Category
Not AfA (To be Assessed with Guidance)

Metadata link
http://gis-easimap.ea.gov/eametadataexplorer/details?id={5D749F5A-1432-470A-82B7-11EF6839FB26}

Update frequency
N/A

Supply frequency
N/A

Third Party Prior Rights
No

Data Contact / Supply
N/A

Format Supplied
Shapefile

Special Conditions
All attributes can be used for the purposes of carrying out a Flood Risk Assessment [as defined in PPS25 - to be confirmed] and/or emergency planning purposes as defined in the Civil Contingencies Act 2004. The following attributes: Maximum Flood Depth, Maximum Flood Velocity, Maximum Flood Hazard, Initial and Peak Flood Arrival Time, Maximum Composite Flood Depth, Maximum Composite Flood Hazard, Risk Infill (if required) should not be directly or indirectly identifiable either collectively or individually, in any publically reviewable document (of any format).

Information Warning
None

Guidance
For Category 1 and 2 responders these data are approved for re-use. **The National Protocol for Handling Transmission and Storage of RIM v6.3 December 2010 should be followed.** These would be charged as Non-Special data. Note that these reservoir flood outlines are published on WIYBY.

Attribute Name	Attribute Description	Responding to Requests	FoI Publication Scheme	Information Re-use Register
Location of Subject Reservoir	Point location of subject reservoir. These have been manually changed in some instances and are located within the reservoir outline.	Y	Y	Y
Location of Cascade Failure Reservoir(s)	Point location of cascade reservoir(s) (if applicable). This indicated the location of a reservoir only if it were to flood from the impact of an upstream reservoir. I.e. these would not breach.	Y	Y	Y
Location of Breach	Point location of the assumed breach location. Includes multiple breach locations (if applicable).	Y	Y	Y
Maximum Flood Extent	The maximum extent of modelled dam breach flood inundation – this is shown as a single feature.	Y	Y	Y
Maximum Flood Depth	The maximum dam breach flood depth in ACSII grid format (c. 25%) or vector datasets (c. 75%). Results are held in 10 – 50 metres squares and show depth by metres.	N	N	N
Maximum Flood Velocity	The maximum dam breach flood velocity in ACSII grid format	N	N	N
Maximum Flood Hazard	The maximum dam breach flood hazard in ACSII grid format (c. 25%) or vector datasets (c. 75%). Maximum flood hazard risk classified as: - Extreme Hazard (H > 2.00) - Significant Hazard (1.25 < H < 2.00) - Moderate Hazard (0.75 < H < 1.25) - Low Hazard (H < 0.75)	N	N	N
Initial and Peak Flood Arrival Time	1. Cross-sections polylines at 1km intervals, in terms of river centreline, downstream of the subject reservoir. 2. An associated EXCEL file containing the cross-section IDs, and initial and peak flood arrival times at each cross-section. 3. A GIS file that combines cross-sections detailed in [1] with travel times detailed in [2] so that they can be plotted in accordance with the example* map provided in Appendix A.	N	N	N
Maximum **Composite** Flood Depth	The maximum dam breach flood hazard in ACSII grid format for all the breach locations at that reservoir.	N	N	N
Maximum **Composite** Flood Hazard	The maximum dam breach flood hazard in ACSII grid format for all the breach locations at that reservoir.	N	N	N
Risk Infill (if required)	Areas of inundation not modelled by any breaches at a reservoir which may be at risk of inundation if the	N	N	N

Attribute Name	Attribute Description	Responding to Requests	FoI Publication Scheme	Information Re-use Register
	breach location were to be altered. This occurs in circa <1% Most breaches have been modelled using the middle of a barrier, however, these include models where there is a likelihood of breaching at a different location.			