<u>Research and analysis: Making better</u> <u>use of local data in flood frequency</u> <u>estimation</u>

Flood frequency estimates are an essential part of flood risk management. They tell us what flood flows are expected to occur for a given rarity. They are central to many important decisions, such as the design and operation of flood defences, flood mapping, informing planning decisions in flood risk areas and long-term investment planning.

Methods described in the Flood Estimation Handbook (FEH) published in 1999, and its many subsequent updates, are considered the industry standard for flood estimation in the UK. They are used extensively by hydrologists from both the public and private sectors.

Flood frequency estimates (also known as design flood estimates) are associated with many sources of uncertainty. These hydrological uncertainties are often the most uncertain component in any flood risk assessment. As a result, any reduction in the uncertainty of flood frequency estimation has considerable benefit. One way to reduce uncertainty is to incorporate complementary local data to refine the results obtained using the FEH methods.

<u>Research and analysis: Accounting for</u> <u>residual uncertainty: an update to the</u> <u>fluvial freeboard guide</u>

The Environment Agency has developed a new guide that will help flood risk managers identify and manage the uncertainty in their flood risk assessments and flood defence designs.

This new guide replaces the Environment Agency's Fluvial Freeboard Guidance Note (report W187) published in 2000. It is written for all flood risk management authorities, developers, and engineering consultants who work on their behalf.

<u>News story: Work underway at Kilbowie</u> <u>Road, Clydebank</u>

The Coal Authority has taken responsibility for the site and the repair works will take between 6 to 8 weeks to complete.

Only a 6 metre deep hole is visible at the road surface, but this leads to the shaft which goes down a further 56 metres to a total depth of 62 metres.

Work began last week with stone, pressurised grouting and a concrete plug being needed to stabilise the ground. Once the shaft is filled, work will begin on reconstructing the road.

Tim Marples, Head of Public Safety and Subsidence for the Coal Authority, said that work to repair the collapse in Kilbowie Road has already begun.

He added: "The unrecorded shaft at Kilbowie Road is one of our top operational priorities and our prime concern is the safety of the public.

"Our engineers have designed a solution to safely fill the shaft and repair the road and we're working with West Dunbartonshire Council and the utility companies on our proposals.

"This particular repair is complicated by the exposed utility services within the 62 metre deep void, which we're working to protect.

"From our experience, the work will take between 6 to 8 weeks to complete and cost in the region of £250,000.

"Our aim is get the road re-opened as soon as possible to minimise the impact on local residents and traffic. We apologise for the inconvenience and disruption caused presently and during the forthcoming works."

For more details please read the full press release

For further updates please visit West Dunbartonshire Council's website

<u>Transparency data: Harwich Haven</u> <u>authority – Trial disposal</u>

Harwich Haven Authority (HHA) is seeking to have a new dredged material disposal site designated. Some of the dredged material is used in beneficial reuse schemes with the remainder disposed of at a licensed offshore disposal ground called Inner Gabbard located about 30km east of Harwich. HHA believe

that a disposal site closer to shore would help reduce carbon dioxide emissions, steaming time and fuel.

The MMO has granted Harwich Haven Authority a marine licence that permits 2 trial disposals of 500,000 cubic metres of dredged material arising from maintenance dredging at Harwich and Felixstowe Harbour. The trial disposal site is referred to as the Harwich Haven disposal site (Cefas Site Code: TH027).

A condition of this licence is that monitoring data is collected during the course of the two trial disposal campaigns and a Monitoring Report is submitted to the MMO within four months of completion of the two trial campaigns. This Monitoring Report can be viewed on this page.

The monitoring report aims to provide the information necessary to inform the MMO's assessment of the suitability of the proposed new site for designation to receive future dredged material.

The MMO is not obliged by statute to consult publically on this issue but the MMO has always been of the view that the general public and not just known stakeholders should have the opportunity to make representations.

If you would like to make a representation please make sure that you do so in writing using the contact details on this page. Representations should quote reference L/2013/00392.

Notice: MK18 2HF, FCC Waste Services (UK) Limited: environmental permit issued EPR/BS8605IQ/S012

The Environment Agency publish surrenders that they issue under the Industrial Emissions Directive (IED).

This decision includes the surrender letter and decision document for:

- Operator name: FCC Waste Services (UK) Limited
- Installation name: Calvert Landfill Site
- Permit number: EPR/BS8605IQ/S012