



Appraisal of existing flow stemming systems

Project Summary SC090025/S2

A new report published by the Environment Agency provides an appraisal of existing, flexible flow stemming systems that could be used in place of traditional systems. These 'stop logs' have traditionally been used to block the flow in open channels for emergency or routine maintenance, but as such barriers are often tailored for a particular site they are not particularly cost-effective.

A one-week study was undertaken by Halcrow Group Limited, who reviewed published and unpublished literature and contacted manufacturers and other key individuals in the field. The data obtained were used to produce a matrix which captures:

- product name;
- manufacturer;
- description;
- photograph/diagram;
- applicability;
- cost;
- dimensions;
- health & safety considerations;
- pros and cons of each product;
- head conditions devices can operate under;
- requirement for pre-made slots/grooves.

All of the products included in the matrix are available within the UK, though some are manufactured or supplied from overseas, and all are 'temporary' in the sense that they do not require permanent structural fittings.

The report includes the matrix as an appendix. The main text of the report briefly introduces the problems with using stop logs and the criteria to be borne in mind when considering alternative methods. It then introduces the four main groups of proprietary flood defence and flow stemming systems: tubes, containers, temporary freestanding barriers and temporary frame barriers. For each of these, typical characteristics (both positive and negative) are listed and images are provided of the products appraised.

As the report stresses, this is just an initial study, and further investigation would be needed of products that might be used. However, such flexible flow stemming

systems could perhaps be employed over a number of sites, grouped geographically within operational regions and areas, which would further improve their cost-effectiveness by reducing storage and maintenance costs.

This summary relates to information from project SC090025/R2, reported in detail in the following output(s):

Report: SC090025/R2

Title: Appraisal of existing flow stemming systems

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