

Case study: Cockermouth, Cumbria

Self-closing flood barriers have been used as part of a flood defence scheme in Cockermouth, Cumbria. It is expected that similar barriers will form part of the protection within Stonehaven.

The self-closing flood barrier (SCFB) uses the rising floodwater to automatically raise the barrier. SCFB do not require any human intervention, which would otherwise put lives at risk. They have a design life of 100 years and require low maintenance.



[above] Construction of the scheme took place in 2012 and 2013 and reduced the risk to 360 homes and 55 businesses.



[above] The Cockermouth scheme fully deployed, with an additional 1m of protection above the existing wall.  
[below] When in the 'resting' position, the barriers are protected within the wall and do not impact on the attractive riverside views.

Protection within sensitive landscapes

Cockermouth is an attractive and historic market town similar to Stonehaven, whilst the area along the River Cocker is a Site of Special Scientific Interest. The scheme required an effective and sensitive solution that would not adversely affect the unique qualities of the town. The SCFB is only deployed when there is a threat of flooding, which means that the river views that are important to residents and visitors remain unaffected.

When deployed, the barrier rises to 1m (3'), providing additional protection above the existing wall. The system can be linked to audible, visual and electronic warning systems.

The system has low operational costs, unlike expensive manually-operated systems. When not in use, the barrier is protected underground and sealed against the elements.

[below] Testing of the barrier, with coir matting along the base of the wall to encourage vegetation.



[below] Final testing of the scheme, with the barriers partly deployed. Note the use of local red sandstone for the coping and cladding of the upgraded wall.

