

Scour and River Bank Protection in the United Kingdom

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Storm Desmond

- **Storm Desmond** was an extratropical cyclone and the fourth named storm of the 2015–16 UK and Ireland windstorm season. Desmond directed a plume of moist air, known as an atmospheric river, which brought record amounts of rainfall to upland areas of the UK and subsequent major floods.
- Hit on the 5th and 6th December 2015, 405mm of rainfall in Cumbria
- 5200 homes were flooded
- Thousands of trees and millions of tons of sediment were ripped from riverbanks
- Eight miles south of Carlisle a slow moving landslip started to occur
- In February the Settle-Carlisle two track railway was closed
- An aerial survey showed the entire hillside was moving, estimated at 500,000 tonnes.

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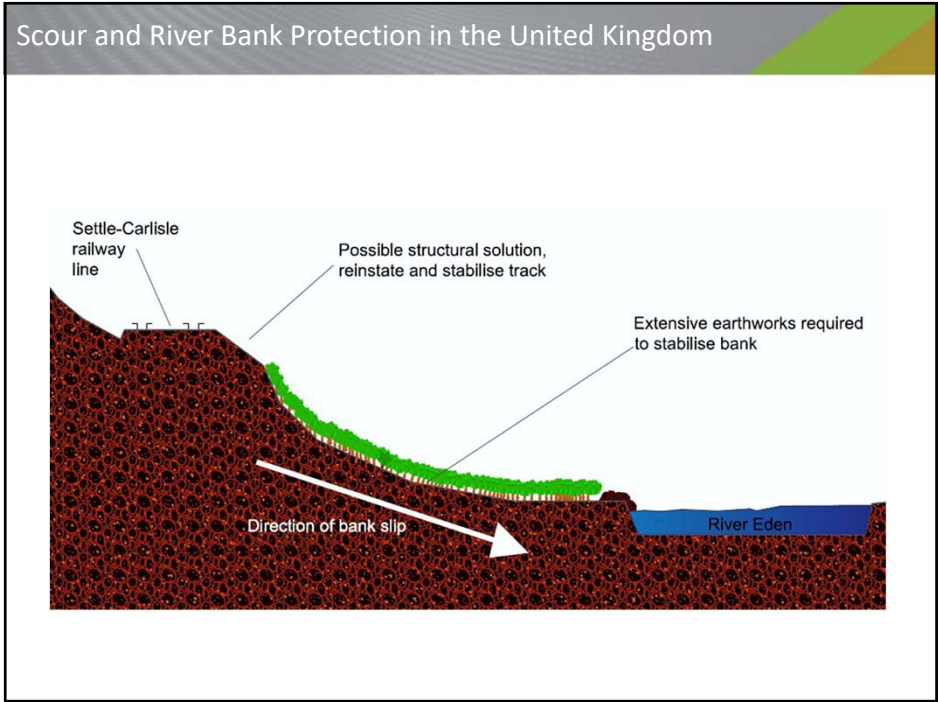


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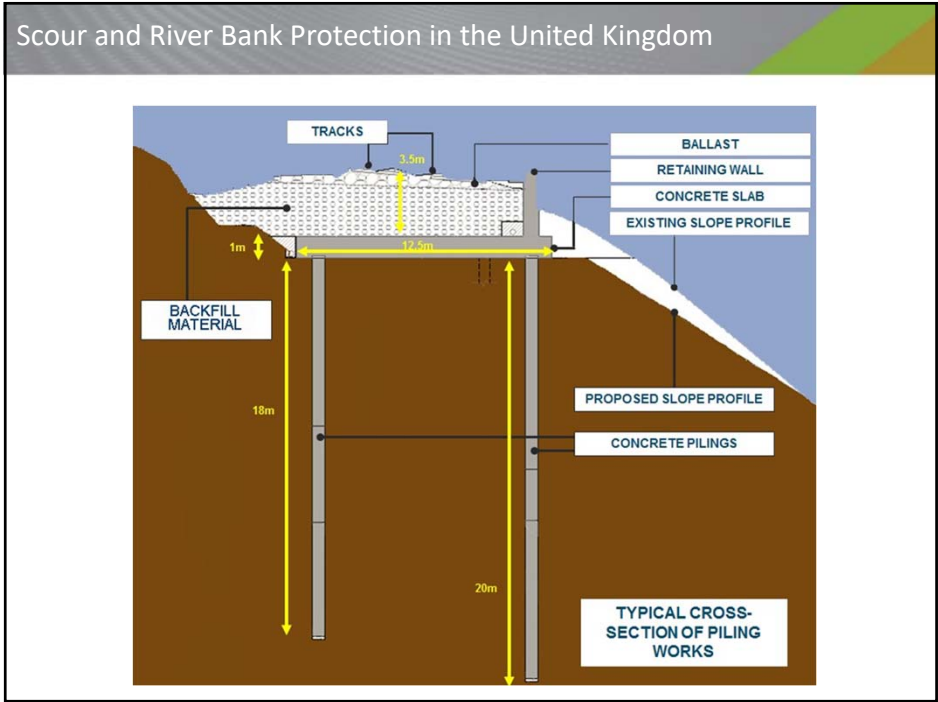
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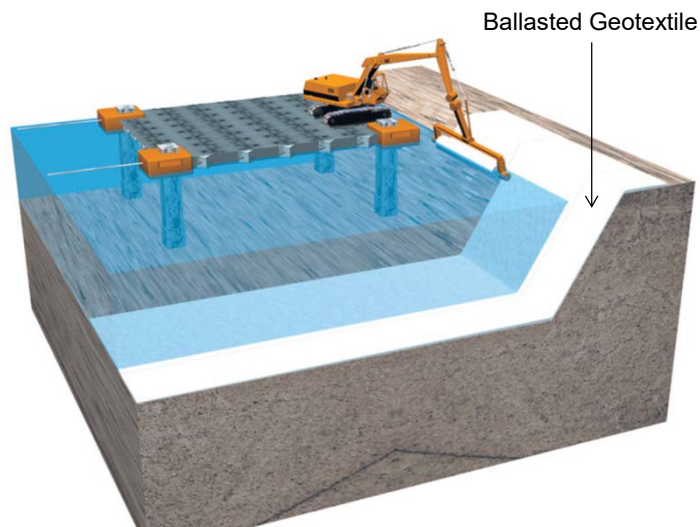
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Protecting the future of Network Rail – Eden Brow Scour Protection



- **Ballasted Geotextile Filter** – 1224m²
- **Geotextile Filter** – 5880m²
- Flood Protection Scheme to protect rail line above. Part of the emergency works for Network Rail – Settle to Carlisle.
- **Client** - Network Rail
- **Contractor** - Story Contracting Ltd
- **Engineer** – AECOM (Leeds)

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Eden Brow – River Eden 2017



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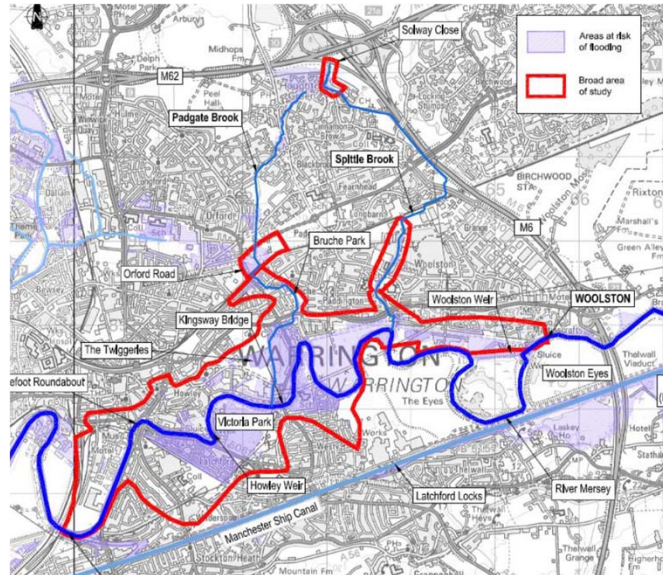
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River Mersey Warrington Flood Risk Management Scheme



- Ballasted Geotextile –
- Multi Million Pound Flood Risk Management Scheme to deliver 1-100 year flood protection to the area.
- **Client** – The Environment Agency
- **Contractor** – Galiford Try/Black & Veatch Joint Venture
- **Sub Contractor** – TMS Maritime
- **Engineer** – CH2M (Birchwood)

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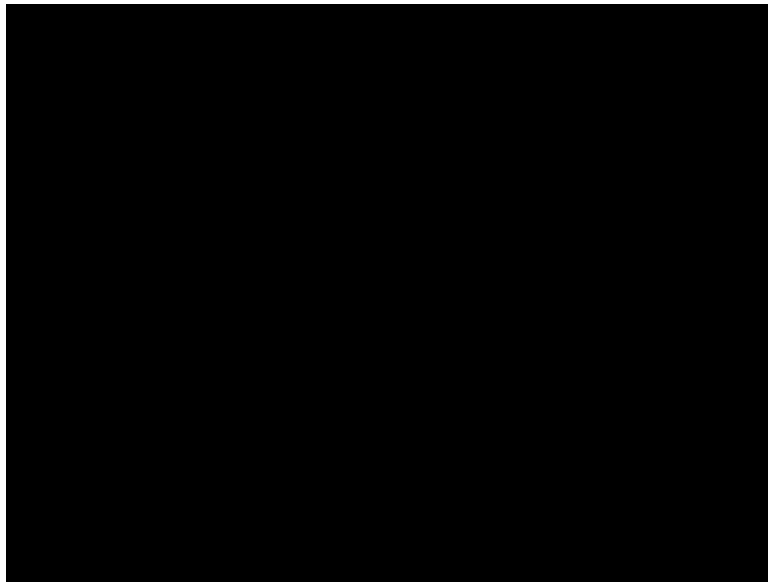
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River Mersey Warrington Flood Risk Management Scheme



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