

## River Diversion, Colleton Mill

Devon's River Taw is known to have a mind of its own – with a rapidly varying flow and a disregard for anything in its way. The locally important Tarka Railway line in North Devon follows the river along much of its length.

In June 2017, WSP and CML were appointed by Network Rail to investigate the imminent collapse of a retaining wall at Colleton Mill, which was precariously supporting a length of the railway line, adjacent to an aggressive meander of the river. The wall had already partially failed and its remains were seriously undermined, risking further collapse and line closure.

The challenge was to find an innovative approach which would not only meet the site's complex ecological constraints (including consideration of species such as bats, otters, fish and nesting birds), but also gain landowner and stakeholder approval. Conventional construction methods were not appropriate. Yet, a solution had to be found in order to prevent further migration of the river towards the railway. Whilst recognising the urgency of the situation, WSP and CML engaged the Environment Agency to explore the options available.

A radical approach to permanently move the river was conceived. This would divert the river back towards a historic route, observed over 100 years ago. It would also offer long-term operational security, resilience to climate change and allow the works to be implemented on time without environmental detriment.

Under normal circumstances, a scheme of this type would take at least 18 months to design and construct. Against all the odds and after four months of frenetic activity, the team reached a major milestone on the 27th September, when an entirely new channel was opened. This was ahead of schedule and in advance of the fish spawning season. Consequently, the River Taw has been tamed, safeguarding the railway.