

Ennerdale Weir Removal, England

Key issue	Limited complexities project. Managed sediment removal.
Project Name	Ennerdale Mill Weir
Country	England
River	River Ehen
Dam purpose	Paper mill dam
Project lead	West Cumbria Rivers Trust
Project goals	Fish passage for migratory species and freshwater mussels
Dam material	Concrete, brick, stone and timber
Dam measurements	2m high, 50m wide
Additional benefits	400 meters of impounded stream restored. 16 km of upstream river reconnected.
Cost	Approximately £400,000
Year removed	2018
Summary	<p>The Ennerdale Mill Weir removal is an example of a successful project that was accomplished with limited complexities.</p> <p>The Ennerdale Mill Weir was removed in 2018 to restore river habitat for migratory fish and provide better protection for freshwater mussels, as the weir was likely to fail in the short-term and potentially wipe out mussel beds downstream. The nearly 250-year-old former paper mill dam was unused yet continued to block upstream access and degrade river habitat. The dam was 2 meters high and spanned 50 meters across the River Ehen. Several measures were taken to limit sediment release. The dam was first notched to allow the water level to come down so that the accumulated sediment upstream was exposed above water-level for safe removal in the dry. A boulder 'causeway' was installed below the weir face to allow machinery to access the weir without disturbing river-bed sediment, and an aquadam was temporarily installed to control the flow of water over the face of the weir. Once work began in the river it took only one week to remove the dam and restore the river channel. Lastly, stone protection was added to the exposed banks both above and below the weir.</p> <p>The project was led by West Cumbria Rivers Trust as part of the Environment Agency's River Restoration Programme with funding from the Environment Agency, Natural England, the European Maritime and Fisheries Fund, and James Fisher Nuclear.</p>
Additional information	West Cumbria Rivers Trust https://westcumbriariverstrust.org/projects/ennerdale-mill-weir-removal Dam Removal Europe https://damremoval.eu/portfolio/ennerdale-mill-weir-england/