

Kentchurch Weir Removal

How the River has adjusted after two years
and a very wet summer.

Peter Gough – Natural Resources Wales

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Background

- Kentchurch Weir removed in August 2011
- Natural Resources Wales* “Salmon for Tomorrow” programme.
- Funding provided by Welsh Government under the UK European Fisheries Fund Operational Programme.
- Concrete and masonry weir
- Approximately 2m high and 30m wide
- Slight skew alignment across watercourse
- A relatively modern structure at a historic weir site

* Formerly Environment Agency Wales

The Weir



Inception to Removal

- High-level walkover survey to identify viable sites on a catchment scale
 - Scale of barrier problem
 - Geomorphology Impacts of removal
 - Engineering feasibility
 - Environmental impacts study
- Detailed Feasibility Study to identify key risks and management strategies.
 - Supporting studies including archaeological assessment, sediment sampling, flood risk analysis
- Procurement of Contractor and Demolition of Weir
 - Preparation of Works Information
 - Environmental management

The Weir



The Weir



Bank Reinstatement



Bank Reinstatement



The New River Channel



Upstream Reach



(<http://www.bing.com/maps/#Y3A9NTEuOTI3Mjl5fi0yLjg0NjE4MCZsdmw9MTImc3R5PXI=>)

Upstream Reach – Before Removal

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Upstream Reach – Immediately After Removal (August 2011)



Upstream Reach – May 2012



Upstream Reach – July 2012

ATKINS



Bank Erosion



Field Drainage



Current Update

- The area affected by the erosion is within the anticipated “impact zone”.
- Prior to removal, the strategic decision was taken to monitor the river’s adjustment and manage as necessary, as opposed to pre-emptive intervention.
- Initial significant change took place approximately 10 months after removal, with sections of bank slumping back to a more stable angle of repose.
- In the subsequent 12 months similar adjustment has affected a longer reach, creating an almost continuous sloped bank profile upstream of the weir.
- In June 2013, works are planned to stabilise the adjusted reaches and prevent further “land take” within the farmland.



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