

Matthew Hemsworth - BSc MSc MCIWEM C.WEM

Deputy Head of Environment and Sustainability

Technical Director - Fluvial Geomorphology and River Restoration

Biography

Chartered Technical Director and Deputy Head of Environment and Sustainability at JBA, with 17 years' experience in fluvial geomorphology and environmental consultancy. Proven track record delivering sustainable catchment, river restoration, and enhancement schemes in collaboration with regulators, risk management authorities, development agencies, utilities, and Non-Governmental Organisations. Skilled in leading multidisciplinary teams to develop and appraise multifunctional habitat and environmental management solutions across fluvial, estuarine, and coastal environments. Strong technical leader with expertise in integrating environmental benefits into infrastructure design and managing projects involving extensive stakeholder engagement. Co-author of CIRIA industry guides on culverts, screens, outfalls, and weirs, and experienced trainer in environmental assessment for clients and academia.

Qualifications

2007 – MSc Environmental Dynamics, Loughborough University

2006 – BSc Geography, Loughborough University

Employment

2019 - present	Jeremy Benn Associates Limited, Technical Director for Fluvial Geomorphology
2017- 2019	Jeremy Benn Associates Limited, Chartered Principal Geomorphologist
2014 - 2017	Jeremy Benn Associates Limited, Chartered Senior Geomorphologist
2010 - 2014	Jeremy Benn Associates Limited, Geomorphologist and Flood Risk Analyst
2008 - 2010	Jeremy Benn Associates Limited, Assistant Geomorphologist and Flood Risk Analyst
2007 - 2008	Haycock Associates, Junior Environmental Consultant

Key Experience

River Aller, Stage 0 River Restoration Scheme: Led the design and delivery of an innovative 'Stage 0' river restoration scheme in Exmoor National Park, enhancing geomorphology, ecology, and landscape value. Collaborated with academic experts to develop cutting-edge restoration techniques and proactively engaged with clients and regulators through workshops and site meetings. Supported securing planning consent within a sensitive landscape through effective communication and visualisation, enabling timely implementation of the scheme.

Cyclone Freddy Geomorphological Response Assessment, Malawi: Coordinated modelling and GIS analysis to assess geomorphological change and erosion risk to key infrastructure following Cyclone Freddy, working with teams to identify landslide-prone zones and vulnerable river systems.

Dar es Salaam, Tanzania Fluvial Geomorphology Assessment: Led a city-wide sediment dynamics assessment in Dar es Salaam, delivering technical analysis and sustainable mitigation strategies to address erosion and sedimentation impacts as part of urban resilience planning.

Flood Hazard Plans for Romania: Water Framework Directive Appraisal: Led compliance assessments of proposed Flood Risk Management Plans against the EU Water Framework Directive, conducting hydromorphological evaluations and collaborating with flood risk teams to develop environmentally sustainable and compliant mitigation scenarios.

River Restoration Planning in Wales: Directed a suite of restoration projects addressing ecological and geomorphological challenges in Heavily Modified Water Bodies across Wales. Led assessments of river modification impacts, including weirs, dredging, straightening, sedimentation, and urban pressures and developed realistic, cost-effective restoration plans aligned with WFD objectives. Delivered >20 catchment-scale plans, many now progressing to implementation and supported client capability through bespoke training for >50 NRW staff, covering geomorphology, ecological assessment, and restoration techniques via classroom and field-based sessions.

Publications and Presentations			
	Title	Author	Publisher
2025	<i>Tattiscombe Floodplain reconnection scheme</i>	M Hemsworth	RRC Conference Presentation
2024	<i>Rebalancing River Lateral Connectivity: An Interdisciplinary Focus for Research and Management</i>	Richard J. Mason, Matthew F. Johnson, Ellen Wohl, Catherine E. Russell, Julian D. Olden, Lina E. Polvi, Stephen P. Rice, Matthew J. Hemsworth, Ryan A. Sponseller, Colin R. Thorne	Wires Water
2024	<i>Environment Agency (2023) River Restoration to increase ecological resilience – what works in which rivers. Environment Agency, Bristol.</i>	Seb Bentley, Judy, England, Andrew Griffiths, Matt Hemsworth, George Heritage, Luke Hussey, Dave Mould, Rob Williamson	Environment Agency
2024	<i>Holnicote River Restoration</i>	Eardley, B. and Hemsworth, M.	RRC Conference Presentation
2023	<i>Mayfield Park</i>	Hemsworth, M.	RRC Conference Presentation
2021	<i>Environment Agency (2021) Understanding river channel sensitivity to geomorphological changes. Environment Agency, Bristol.</i>	Natasha Todd-Burley, Rebecca Ing, Matthew Hemsworth	Environment Agency
2019	<i>Culvert, Screen and Outfall Manual</i>	Benn, J.R., Kitchen, A, Kirby, A, Fosbeary, C, Faulkner, D.S., Latham, D & Hemsworth, M	Construction Industry Research and Development Association, London
2016	<i>River Weirs - Design, maintenance, modification and removal (C763)</i>	Kitchen, A., et.al.	Construction Industry Research and Development Association, London.