Northern Bridge Consortium Collaborative Doctoral Awards Competition (Staff-led)

# NORTHERN BR—DGE CONSORTIUM DOCTORAL TRAINING PARTNERSHIP

# **Project Proposal Application**

To be completed by the lead proposed supervisor, with input from the non-HE Partner Organisation(s).



SECTION 1: PROJECT SUMMARY AND APPLICANT DETAILS					
Proposed Proj	ect Title:	Our Calder History: Our Calder	Future		
Project Summary: (Maximum 100 words)		Calder and Colne Rivers Trust (CCRT) must urgently balance the environmental and heritage needs of Yorkshire's heavily modified, post-industrial River Calder. This archival PhD project analyses the Calder's past management because historic priorities have shaped the development and management of today's Calder catchment. The research will inform environmental policy by sharing archival evidence of the legacies of historic river management in the present and future with CCRT, Yorkshire Water (YW), the Environment Agency (EA) and local councils. By incorporating this PhD project's conclusions, CCRT's new management plans will better accommodate competing needs of heritage, people and environment in the future.			
Host University: Northumbria University					
	Name of Non-HE Partner Organisation(s): (Add more lines if needed)				
Calder and Colne Rivers Trust (CCRT)					
2.					
Contact(s) at Non-HE Partner Organisation(s): (Add more lines if needed)					
Name:	Dr Jane Rowling		Email:	jane.rowling@calderandcolneriverstrust.org	
Name:	Dr Andy Bray		Email:	Andy.bray@calderandcolneriverstrust.org	
Primary AHRC Subject Area: Select one subject area from the list here. Do not add or amend subjects - there will not be a corresponding Subject Area panel to assess the application.		History			
Does the project include a Creative Practice component?			YES 🗆	NO ⊠	
Do you consider the project to be interdisciplinary?			YES 🗆	NO ⊠	
If you consider the project to be interdisciplinary, please state why:  (Maximum 100 words. Note, all applications will be assessed by the appropriate primary subject area cross-institutional panel.)					

#### **SECTION 2: PROJECT PROPOSAL AND CASE FOR SUPPORT**

### Please provide full details of the proposal and make your case for support below:

(Maximum 750 words)

West Yorkshire's River Calder is the UK's second most polluted catchment, featuring 200 weirs which impede wildlife. In 2023, only 14% of UK rivers are ecologically 'good', predicted to drop to 6% by 2027 (EA). Currently no UK river contains acceptable levels of chemicals (The Rivers Trust). Flowing in a similar vein with the River Tyne and other British post-industrial rivers, the 45-mile Calder endured substantial re-engineering to facilitate industrialisation and urbanisation. Straightening and canalising restricted the natural functioning of the Calder's meanders and flood plains. Nevertheless, man-made vestiges are valued by communities as quintessential elements of regional identity and industrial heritage. This environmental history project will help CCRT to balance urgent environmental needs with those of passionate publics who prioritise preserving industrial heritage. This complements work by Great Yorkshire Rivers (YW, the EA and The Rivers Trust) to remove obstructions which impede fish passage and worsen flooding and it underpins the Water Framework Directive, which places the removal of obstructions at the heart of achieving 'Good' ecological status.

The student will rebuild a long-term developmental story of the reasoning, priorities and conceptualisations which produced today's Calder. Using evidence at West Yorkshire Archive Service, The National Archives and Nottinghamshire (including council and legal records, river board minutes, treasurers' accounts, planning documents, architectural plans, correspondence, petitions and newspaper articles), they will track and analyse historic debates, planning processes, decision-making, funding and technical construction methods of the Calder's in-river installations from 1750 to 2000. Documentary archives will be cross-referenced against visual examinations of in-river features. Much evidence details contention and conflict over human interventions in the Calder from 1625. Close analysis of intervening industrialisation and urbanisation will explain the legacies, competing needs and problems, which currently challenge CCRT. The student will record fifty oral history interviews and focus group discussions with local communities with whom CCRT already have strong relationships.

The doctoral thesis will answer the following research questions from 1750 to 2000:

- Which organisations and institutions owned, regulated and interacted with the Yorkshire River Calder and its tributaries (i.e. water bed, floodplains and channel) and how and why did this change over time?
- In which key ways was the river and its tributaries used and how and why did they change over time?
- Which types of manmade structures (e.g. weirs and jetties) were installed into the river system, where were they installed and for what purpose?
- In which ways was the river system re-engineered?
- To what extent did industrial producers come into conflict with other groups (e.g. fisheries, anglers, councils and local residents)?
- What was the impact of industrialisation and urbanisation on the river's environmental health?
- Were any efforts made to protect the river from industrial and residential pollutants and how was environmental damage measured and reported?

Rowling will support the student to present their research with decision-making meetings to answer these questions:

- What do humans, water, plants and animals need from the Calder in the present and future?
- How can CCRT better balance the competing needs of humans with the river's environmental health?
- What are the key public conceptions and misconceptions of the river's industrial history?
- In which ways can industrial heritage be preserved at the same time as removing installations physically from the river system?

The student will also develop a digital river 'flythrough' for CCRT's website, enabling visitors to explore documents, images and recordings relating to each feature to be removed without adversely affecting the river's flow and habitats.

Skelton's Tyne After Tyne: An Environmental History for a River's Battle for Protection, 1529-2015 (2017) shared archival research and oral histories with multiple environmental stakeholders to inform northeastern catchment management. It complemented wider environmental history research on British rivers, including Jim Clifford on the River Lea, Peter Coates on the River Mersey and Christopher Smout on the Firth of Forth. The PhD student will contribute to this field a valuable case study on the lesser-researched Yorkshire Calder, in comparison with the Tyne and other British rivers. Despite having been a key centre of industrial production (soap, coal and clothing), the Calder and indeed all northern English rivers remain a lacuna in British industrial and

environmental historiography. Astonishingly, John McNeill's An Environmental History of Twentieth-Century Britain omits the Calder completely and marginalises northern England substantially. In summary, the project contributes meaningfully to river historiography, improves flood mitigation and creates a methodology for in-river barrier removal to be rolled out nationally. After graduation, ample employment opportunities await in environmental practice or as an impactful academic researcher fit for the future.

Provide details of any resources and facilities, including equipment, fieldwork, training, etc., that will be required to complete the project successfully. NBC has limited Research Training Support Grant funding, which may affect the feasibility of high-cost projects. Please note where you might also secure additional funding, (e.g. partner organisations; department or school). Include estimated costs:

(Maximum 200 words)

In the first year of the project, CCRT will provide Heritage England online training (Assessing Heritage Significance) and a course on 'Evaluating Heritage Information' free of charge. The Rivers Trust will provide ArcGIS training free of charge and training to record the oral history interviews will be provided by The National Centre for Research Methods (<a href="https://www.ncrm.ac.uk/">https://www.ncrm.ac.uk/</a>) in conjunction with support from the academic supervisor who is a proficient oral historian.

CCRT will purchase the following equipment for the student's exclusive use, which must be returned to CCRT at the end of the project: multi-track recorder suitable for oral history recordings plus an accessory pack (Zoom H4n, H5, or similar) £450; a digital camera to photograph archival documents and in-river features, £800; a laptop capable of running ArcGIS and handling large volumes of oral history recordings, £1000; a tablet capable of running FieldMaps, £400; and Waders, £60. Total cost of new equipment: £2,710.

CCRT will loan to the student the following equipment which they already own, to be returned at the end of the project: a 360° Go-pro camera, £437; and a drone with drone kit, £847.50. Total value of existing equipment: £1,284.50.

Total value of equipment supporting the student: £3,994.50.

Outline the arrangements for communication between the non-HE partner organisation and the academic host institution in regard to project management and monitoring academic progress:

(Maximum 200 words)

An in-person meeting to introduce the student to supervisors and several CCRT staff will outline processes, expectations and milestones. CCRT staff will schedule shadowing of various roles in CCRT and with partners to contextualise the project. Thereafter, the student will be accountable to Jane Rowling (in person at CCRT's office, on fieldwork with practitioners or virtually) for a minimum of one day per week or one full working week of five continuous days in every five weeks. The student will meet Skelton once monthly, join Northumbria's Environmental Humanities Research Group and benefit from Dr Gareth Roddy's secondary supervision. Skelton will meet CCRT staff on a quarterly basis to review progress and relay academic progress to ensure they are supported adequately by Northumbria University and CCRT. Skelton and Rowling worked together on the AHRC-funded 'Past Floods Matter' project, as Co-I and PDRA respectively between 2017 and 2020, jointly analysing over one hundred historic northern English rivers and drainage networks. CCRT are keen to draw on Skelton's expertise in industrial river history and Skelton is keen to engage in shadowing some fieldwork on the Calder to inform her own research so contact will be frequent.

What benefits will there be for the candidate and the non-HE partner organisation as a result of your collaboration? (Maximum 300 words)

The student will have access to a network of specialists in environmental water management and the opportunity to learn alongside them. The student will also gain transferable skills, including public engagement, stakeholder meeting experience, heritage assessment, event organisation, networking, meeting online with professionals across the country, budget management, working to deadlines, designing online resources for the CCRT's public-facing website, negotiation and decision-making in a partnership working context. They will also have valuable opportunities to make a significant real-world impact through their research, which will play a fundamental role in decision-making around the future management of built in-river industrial heritage in the Calder. They'll create a model for the future management of industrialised rivers, making them a desirable employee in the water sector (including regional Rivers Trusts, the EA, water utilities, Defra, Natural England, local authority water management teams).

The partner organisation, CCRT, will also benefit significantly from this project by utilising the PhD student's research findings in future catchment management plans and policy, possibly even contributing to wider national Rivers Trust or EA policies concerning post-industrial rivers. The ecology and hydrology of the Calder have both been shaped by the catchment's industrial history. Weirs impede the passage of fish, while historic straightening and walling in the river impacts flood management, meaning that rainfall increases the height of the river very quickly. CCRT wish to learn more from the archival record and from the student's oral history

interviews with relevant publics. Many local people hold dear industrial heritage and often oppose the removal of heritage features from the river. This project is a means of performing important due diligence checks before the removal of historical features from the river, to find the correct balance between the needs of heritage and the needs of the environment.

State what financial (if any) or in-kind contribution the non-HE partner organisation will be making over the duration of the award:

(Maximum 100 words. A financial contribution is **not** a requirement. However, the AHRC expect that **non-HE partners based overseas** will make a financial contribution to the costs of the student's return travel and accommodation when visiting.)

CCRT will purchase these items: digital recorder £450, digital camera £800, laptop £1000, a tablet £400 and waders £60. Estimated value: £2,710

Direct mentoring support from CCRT staff, field and office work: estimated value £36,000 over 3 years (20hrs/month @£50/hr) Access to CCRT resources (360° camera, drone, central Rivers Trust support and training for ArcGIS): estimated value £1,284.50 Access to CCRT networks including CaBA, YW, Great Yorkshire Rivers, The Rivers Trust, Catchment Partnership and the EA Total value: £39,994.50

Describe the nature of the collaborative arrangement and the activities the candidate will be undertaking with the non-HE partner organisation:

(Maximum 300 words)

CCRT is a small organisation (8 employees), which will offer the student a thorough grounding in river management, including opportunities to shadow specialists in catchment management, landowner engagement, soil health, project management, fluvial geomorphology and ecology. The student will primarily be supported within CCRT by Dr Andy Bray and Dr Jane Rowling, who both have experience in academic research in very different fields (environmental history and environmental sciences), offering a chance for them to learn in an interdisciplinary environment.

The student will work closely with CCRT staff to understand and quantify the heritage value of in-river built features. They will investigate the technical and social history around these features, and make recommendations about removal and preservation. Their role in the decision-making process will include attending stakeholder meetings with the organisations CCRT works with as a matter of course (Environment Agency, Yorkshire Water, national Rivers Trust, community groups) and documenting the removal or bypassing process of each feature. The student will undertake archival and oral history research, and play a significant role in organising public engagement events. They will be encouraged to build their own professional network through participating in a range of stakeholder events.

The student will also work within the interdisciplinary team at CCRT to produce digital and physical resources, which will allow members of the public to access and understand historical information, and also explain the rationale for the removal of these built features, and the environmental benefits created by their removal. This will serve as a publicly accessible legacy for the project.

The student will also contribute to the CCRT blog and to newsletters and other publications put together by catchment partners, alongside their academic outputs. CCRT works with a number of environmental organisations within the Calder catchment, and will provide introductions to them.

SECTION 3: SUPERVISION AND EXTERNAL ADVISORS				
Primary (or Co-) Supervisor: Dr Leona Skelton				
School or Department:	Humanities	Email Address:	Leona.skelton@northumbria.ac.uk	
Secondary (or Co-) Supervisor: Dr Gareth Roddy				
School or Department:	Humanities	Email Address:	Gareth.roddy@northumbria.ac.uk	

Organisation/Institution:	Dr Jane Rowling	Email Address:	Jane.rowling@calderandcolneriverstrust.org	
Organisation/Institution:	Dr Andy Bray	Email Address:	Andy.bray@calderandcolneriverstrust.org	
Name of Additional Internal or External Advisors or Academic Supervisors, if any:				
Organisation/Institution:		Email Address:		

Explain how the expertise of the supervisory team and external advisor(s) will allow them to support the proposed project and the selected candidate:

(Maximum 500 words)

Within CCRT, the student will be supported for 20 hours per week by Dr Jane Rowling (Farms Liaison Officer) and Dr Andy Bray, with PhDs in environmental history and environmental sciences, respectively. Therefore, the student will be supervised by doctoral graduates who use academic research to solve urgent environmental problems. The student will benefit from Rowling and Bray's own interdisciplinary synergies and connections in conjunction with hands-on catchment management. Rowling's PhD combined oral history and archives. Her monograph, *Environments of Identity* (2022) was awarded the prestigious Joan Thirsk Memorial Prize for the best book on British or Irish rural and agrarian history and she has published five peer-reviewed journal articles. As PDRA on AHRC-funded 'Past Floods Matter' (University of Hull), she worked with stakeholders herself. Rowling has worked in the PhD student's position, sharing her academic research with stakeholders, so she has genuine experience of the challenges and rewards of developing impactful academic research findings and translating them for stakeholders. From 2011, Rowling was an RA on several academic projects: the Pauper Narratives Project; ESRC-funded Integrated Census Microdata; a Wellcome Trust digitisation project; and for Water at Leeds.

Dr Leona Skelton is Associate Professor of History and an archival and oral historian of technology, environment and infrastructure in post-1500 northern England. Making historical research interdisciplinary, useful and applicable to solving problems beyond academia is the hallmark of Skelton's work, enabling her to support the student to develop these crucial practices. She shared her historical research with engineers, geographers, social scientists and creative writers, and with the EA, water utilities, councils, various rivers trusts, Natural England, the Forestry Commission and the Association of Drainage Authorities. Skelton writes white papers, training documents, presentations for various committees and liaises with environmental practitioners frequently. Skelton was an RA for three widely interdisciplinary AHRC-funded projects at the universities of York (2012-13) and Bristol (2013-15), before working for Sheffield University's Pennine Water Group on the EPSRC-funded Grand Challenge for Water, 'TWENTY65'. She worked as Co-Investigator on two AHRC-funded projects, 'Past Floods Matter' (2017-2020) and the UK Climate Resilience Programme's 'CLandage' (2020-2022). As Co-Investigator on the widely interdisciplinary Leverhulme-funded 'Life Stories of Infrastructure' (2023-2026), she supports her PhD project student to share research findings with Tyneside's transport infrastructure stakeholders.

Assistant Professor of History (Northumbria), Dr Gareth Roddy, makes a great fit as second academic supervisor. He leads Northumbria's Environmental Humanities Research Group and has published extensively on twentieth-century British environmental history. He recently completed a Leverhulme Early Career Fellowship exploring industrial landscapes, regional identity and environment in northern England.

CCRT's Dr Andy Bray makes a similarly excellent fit as second supervisor with Rowling. He is Catchment Development Manager and has more than six years of experience supporting and co-supervising Environmental Sciences PhD candidates while working as a Research and Teaching Fellow and Postdoctoral Research Fellow at the University of Leeds. Combining this with Andy's line management experience, he will provide guidance in line with the research objectives and provide pastoral support to the PhD candidate.

#### **SECTION 4: RESEARCH ENVIRONMENT**

## Please provide details about the research environment the selected candidate will be joining and its suitability:

(Maximum 500 words)

The student's time with CCRT will be spent primarily at their offices at the Elsie Whiteley Innovation Centre in Halifax and around the Calder catchment while conducting supervised fieldwork. They will benefit from intellectual discussions with doctoral graduates Rowling and Bray and with other members of the CCRT team in direct relation to the environmental challenges they face on a daily basis. They will also benefit from discussions with several other stakeholders and publics at various meetings and events under the stewardship of CCRT.

Northumbria's Department of Humanities is the ideal environment to support the CDA student's PhD project. Humanities is a research-intensive and interdisciplinary department which boasts one of the largest Environmental Humanities cohorts in Europe. The PhD student will benefit from a highly stimulating intellectual research environment among six environmental historians (Prof Matthew Kelly, Dr Joseph Hardwick, Dr Elsa Devienne, Dr Leona Skelton, Dr Gareth Roddy and Dr Rebecca Wright). As well as meeting with Skelton at least once monthly, and with Roddy at least quarterly, the student will join Northumbria's vibrant and wide-ranging Environmental Humanities Research Group, which incorporates geographers, social scientists, eco-critics, artists and several fellow PhD students who work on environmental humanities. PGRs within the department benefit from a tailored training programme, opportunities to participate in teaching shadowing, and access to bespoke study spaces including the Glenamara Centre. The Institute of Humanities acts as the intellectual hub of Humanities research at Northumbria, supporting research through seminars, reading groups, and writing workshops. The Department also boasts a lively community of PGRs – including a growing number of environmental humanities students who will become the student's supportive peers.

The student will also establish links with nearby Newcastle University and their Oral History Unit and Collective, which will help to support the oral history component of the research. Skelton and Roddy will connect the student with their established networks of environmental practitioners across northern England. Skelton's specialisms in water and infrastructure complement Roddy's focus on industry and landscape, providing a comprehensive intellectual context for the student's research on the Yorkshire Calder catchment. As Deputy Editor of *Environment and History* journal, and Editor of their ECR shorter Snapshots articles, Skelton maintains strong links with PGRs working in environmental history. The student will have opportunities to present their research at PGR events. Northumbria's Institute of Humanities hosts dedicated seminars and conferences for PGRs and they will be encouraged in due course to present at external research events. Skelton is an active member of the European Society of Environmental History (ESEH) and would introduce the student to her networks at that biennial conference. She will also support the student to compare their research with other British river catchments, especially the Tyne and the Eden which she has studied extensively.

#### **SECTION 5: RECRUITMENT INFORMATION**

In the event that your project is successful it will be advertised on the Northern Bridge Consortium website to aid recruitment: <a href="http://www.northernbridge.ac.uk/applyforastudentship/cda/">http://www.northernbridge.ac.uk/applyforastudentship/cda/</a>

Please therefore complete the following Applicant Criteria so that advertising can begin immediately following the outcome of the competition:

Lead Supervisor (or Alternative Contact):	Dr Leona Skelton	
mail: Leona.skelton@northumbria.ac.uk		
Expressions of Interest must be received no	later than:	29 January 2024
Expressions of Interest must take the follow	ring format:	
Please use this space to state the preferred fo	ormat and any required acc	companying documentation, e.g.
<ul> <li>a 500 word personal statement;</li> </ul>		
<ul><li>a 500 word personal statement;</li><li>2-page CV</li></ul>		

#### **APPLICANT CRITERIA**

Candidates must also meet the criteria for acceptance on a doctoral programme as set out by the host institution's Postgraduate Admissions Service. The successful candidate will be required to submit a postgraduate application to their host institution following notification that they are to be awarded a conditional CDA studentship, and meet the conditions of the offer of a place on the doctoral programme.

Education and Professional	Essential Criteria	Proven academic excellence with a BA and MA in history
Qualifications	Desirable Criteria	MA dissertation on Environmental History
Research and Impact Experience and	Essential Criteria	To have undertaken stakeholder engagement training or direct engagement with stakeholders beyond academia
Training	Desirable Criteria	Direct engagement with environmental practitioners and sharing academic research findings with stakeholders
Professional Practice and Job-related	Essential Criteria	An ability to communicate effectively with a range of different audiences
Experience	Desirable Criteria	Experience of presenting academic research directly to stakeholders
laternaria Chilla	Essential Criteria	Excellent oral and written communication skills
Interpersonal Skills	Desirable Criteria	Experience of presenting to regulatory and decision-making committees and boards

Other Factors	Essential Criteria	An awareness of how documentary archival research can be underpinned by river catchment fieldwork
Other Factors	Desirable Criteria	Experience of river catchment fieldwork