Overview of the Natural Environment Research Council

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Research - Water
Our goals

Fund excellent, peer-reviewed environmental science that helps us:

• understand and predict how our planet works
• manage our environment responsibly
Meeting society’s needs

• Benefiting from natural resources

• Resilience to environmental hazards

• Managing environmental change

• Discovery science
We support

- 3,000 scientists and 1,000 PhD students
- 1,000 research projects and 60 UK or international programmes
- 55 universities and 20 research institutes
- UK national capability: 4 ships, 7 aircraft, 6 polar stations, 6 data centres, 32 community facilities
Working Internationally

• NERC works with partners overseas to:
  – agree international research priorities and jointly tackle environmental research challenges
  – access all parts of the Earth in our quest to understand how it works and how it changes
  – make the best use of our resources by aligning national programmes, co-funding calls for proposals, and sharing capability

• NERC's support for international partnerships is embedded across all of our funding streams. For example, we welcome international project partners in all proposals for NERC research grants.
NERC co-funded international programmes

- **Sustaining Water Resources** - Using a whole systems approach to develop a framework for integrated basin-wide models of water resources

- **Changing Water Cycles** - looking at different aspects of water cycle in India, including regional precipitation patterns, evapotranspiration, soil moisture, hydrological storage

- **Science for Humanitarian Emergencies & Resilience (SHEAR)** - improved disaster resilience and humanitarian response by advancing understanding of natural hazards and risks

- **Unlocking the Potential of Groundwater (UPGro)** - Aims to improve the evidence base around groundwater availability and management in Sub-Saharan Africa through: *Understanding the Resource, Governance, Institutions and Access and Impacts of Future Trends*
NERC co-funded UK programmes

• **UK Droughts & Water Scarcity** - characterise the drivers and nature of droughts and water scarcity and examine the multiple and inter-linked impacts.

• **Flooding From Intense Rainfall (FFIR)** –
  – Improve the length and accuracy of forecasts of the occurrence and intensity of rainfall associated with convective storms.
  – Identify the susceptibility to high-intensity rainfall of different catchment types,
  – Enhance flood risk-management through the development of both flood risk estimation and real-time forecasts of floods associated with high-intensity rainfall.

• **Natural Flood Management (NFM)** - supports the novel research on hydrological, sediment and geomorphological processes and flood modelling needed to: improve understanding of the suitability and effectiveness of different NFM measures for a range of flood risk scenarios, including the impact of NFM at the catchment level.
Economic and Social Research Council
About Us

- We began in 1965 as the Social Science Research Council and held our first formal council meeting in January 1966. Our early structure consisted of social science committees that covered 14 disciplines, ranging from anthropology to statistics.

- ESRC Current Priorities as outlined in our Delivery Plan 2016-2020:
  - Understanding the macro-economy
  - Productivity
  - Housing
  - Mental Health and Wellbeing
  - Ways of Being in a Digital Age

- With a new Climate Change Priority being developed in the coming months
The EPE team is primarily responsible for commissioning and developing research in:

- Economics, Management and Business, Human Geography, Environment and Water, Environmental Planning, Energy and Infrastructure, Food and Sustainability and Science and Technology Studies.

The team aims to address ESRC’s key strategic challenges for Social Science such as:

- Global Economic Performance, Policy and Management
- Environment, Energy and Food
- New Technology, Innovation and Skills
The Environment team manage a portfolio of social science research focussing on diverse areas such as Climate Change, Environmental Resilience, Nexus projects, Sustainability, Water related issues, Food Security and Energy.

The team organises and manages investments, develops strategy, and coordinates with stakeholders and other funders.

Claire Spooner, Claire.spooner@esrc.ac.uk is the contact in ESRC for this call.
ESRC have funded lots of research that includes water related issues …

The Nexus Network
  - Looked at Nexus Shocks which are low probability but high impact events like floods.

Centre for Climate Change Economics and Policy
  - Looked at the insurance market with Flood Re and provided evidence to parliament

GCRF Building Resilience
  - These cross council projects look at many resilience issues including Flooding.

JPI Climate Calls, Housing Evidence Call, UK Droughts and Water Scarcity, FAPESP Nexus Call, Urgency Flooding call.
Thank you