CREW CENTRE OF EXPERTISE FOR WATERS

NEWS

Summer 2025

Scottish Government
Riaghaltas na h-Alba

Photo credit: Rachel Helliwell

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CREW Letter:

Now that summer is here, it's a good moment to reflect on a busy and energising period for CREW and our partners. Scotland continues to face increasing pressure from water scarcity—a growing and complex issue driven by climate variability. CREW has played a key role in raising awareness, contributing to media discussions, and providing accessible, policy-relevant research to support Scottish Government Ministers and policy teams in responding to both immediate and long-term challenges.

A recent highlight was our meeting with Scottish Government to review progress within the 2022–2027 Strategic Research Programme (SRP) and look ahead. It was a valuable opportunity to share updates on current and completed water-related projects from CREW and the wider SRP, while aligning on future research priorities. Together, we're working to build Scotland's resilience and prepare for increasing demands on water from industry and households alike.

Among our recent publications, two stand out. Our report on *Prioritising research and development gap opportunities for river woodlands*, led by the Hutton and University of Aberdeen, calls for coordinated, well-funded, and evidence-led action—a timely intervention that is already influencing thinking across sectors. Equally important is our report on *The effect of shellfish, kelp and seagrass beds on flood risk and coastal erosion in Scotland*, which highlights the value of nature-based solutions for coastal resilience.

CREW remains committed to delivering timely, impactful research that informs policy and supports a sustainable future for Scotland's water resources.

We hope you enjoy this edition of the newsletter.

Rachel Helliwell: CREW Director

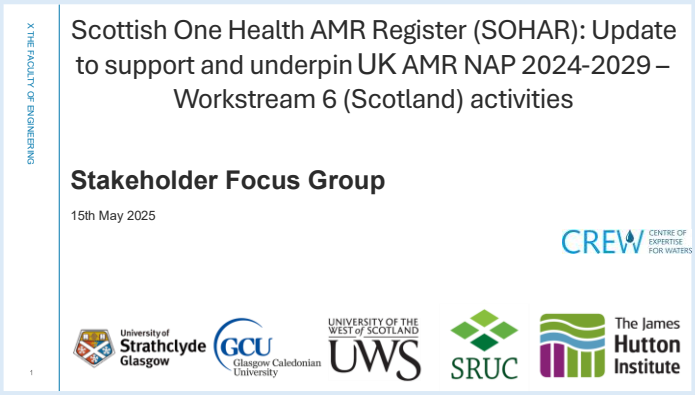
Who We Are and What We Do

CREW alongside researchers from the James Hutton Institute and the Moredun Research Institute, along with members of the Scottish Government, to share updates on water-related research underway as part of the current Environment, Natural Resources and Agriculture Strategic Research Programme (2022-2027). Researchers presented key insights from ongoing projects tackling critical issues including flood risk, pollution, ecosystem health and long-term water security. The session sparked an engaging discussion, looking ahead to the next strategic research programme, which is set to begin in 2027.

Photo credit: Rachel Helliwell

Workshop Spotlight

Understanding Scotland's Role in Tackling Antimicrobial Resistance



A recent CREW workshop brought together experts to shape the future of Scotland's response to antimicrobial resistance (AMR). Led by Professor Fiona Henriquez-Mui (University of Strathclyde), the SOHAR project is updating the Scottish One Health AMR Register, which is now expanded to include new themes such as AI, risk management, and biosecurity. So far, the team has mapped over 670 publications and 280 projects with Scottish links. Workshop discussions explored how to make the register more impactful, highlighting the importance of collaboration, communication, and behaviour change across sectors. As the project moves forward, key outputs will include a finalised register, policy brief, and public summary. Read our workshop article to learn more and look out for the final publication on our publication page.

Latest publications

RiverWoods: Prioritising Research and Development Gap Opportunities for River Woodlands


Photo credit: Mark Wilkinson

Publication page

River woodlands (trees and forests alongside rivers and lochs) can help reduce flooding, improve water quality, store carbon, and support wildlife. But many of Scotland's riverbanks are in poor condition. This project reviewed scientific evidence and consulted over 100 experts to identify remaining knowledge gaps and priorities for action. While river woodlands are widely supported, practical barriers like limited funding, unclear policies, and poor access to information are slowing progress. The report recommends better guidance, improved monitoring, greater collaboration, and exploring new funding models. Strengthening river woodland restoration will support healthier rivers and help address the biodiversity and climate crises in Scotland.

The effect of shellfish, kelp and sea grass beds on flood risk and coastal erosion in Scotland

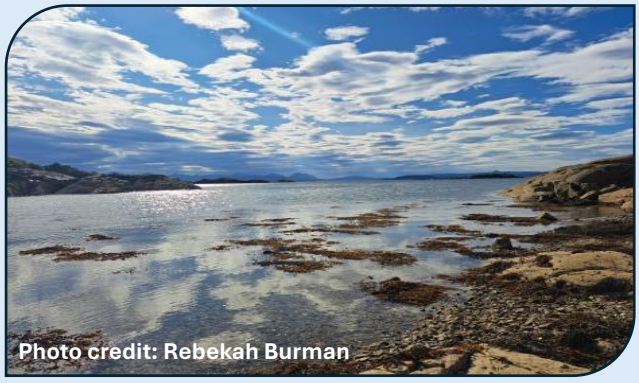


Photo credit: Rebekah Burman

Publication page

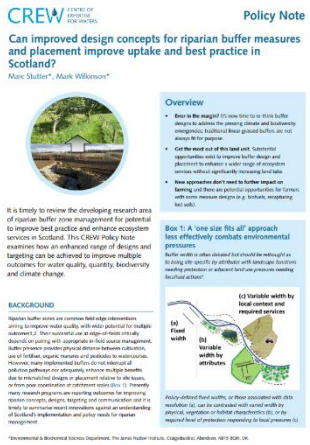
Scotland's coast is increasingly vulnerable to flooding and erosion due to storms and rising sea levels. This CREW project explored whether habitats like kelp forests, seagrass beds, oyster reefs, and mussel beds can help. Kelp was found to be the most effective at reducing wave energy, by up to 70% in some areas, making it especially valuable for protecting exposed coastlines. However, many habitat records are outdated or incomplete, and restoration efforts must be carefully planned. The study recommends better mapping, data sharing, and policy integration, along with sustainable harvesting and public engagement. Protecting and restoring these marine habitats could offer a natural, long-term way to defend our coasts.

To keep up to date with future funding opportunities make sure to visit us here and take a look at our FAQs for more information.

Recent Project Highlights

The Code of Practice on Sustainable and Regenerative Agriculture

Three CREW projects were mentioned in the recent publication of The Code of Practice on Sustainable and Regenerative Agriculture, which acts as guidance for farm and croft activities which can be adopted to help develop sustainable and regenerative agriculture practices in Scotland. Please click on the projects below to find out more.



Valuing Nature: How Cost-Benefit Analysis is Helping Shape Scotland's Water and Soil Policy


Photo credit: Steve Addy

News article page

Cost-benefit analysis weighs the costs and benefits of different actions, helping to identify those that deliver the greatest overall value. A CREW study on the socio-economic impacts of soil degradation on Scottish waters found that compacted soils alone cost Scottish farmers over £25 million a year, with wider economic impacts exceeding £70 million. A second project looking at environmentally effective and cost-efficient sediment management at impoundments assessed how nature-based solutions like tree planting and peatland restoration can reduce sediment build-up at hydropower sites, finding they deliver clear environmental and economic gains. Together, these studies highlight the role of cost-benefit analysis in strengthening evidence-based policy and supporting resilient land and water management in Scotland.

Strengthening Relationships, Building Capacity, and Informing Policy

Reflections and insights from the last year

Following our annual reporting, this section highlights the progress in strengthening relationships, building capacity, and informing policy. By working closely with project teams, CREW ensures effective collaboration, maximises resources, and maintains consistency across its portfolio. End-of-project evaluations identified collaboration as a particular strength, with CREW praised for its professionalism, responsiveness, and high-quality project management.

Acting as knowledge brokers, the CREW team plays a vital role in connecting research with policy, often helping to navigate challenges and support constructive outcomes. Over the last financial year, CREW expanded its communications activity, strengthening evaluation processes, increasing social media reach, and enhancing website content. The launch of *CREW News*, a quarterly newsletter, further enhanced our engagement.

CREW also supported capacity building through initiatives such as a science-policy fellowship on AI and flood forecasting, and a follow-on project to update the Scottish One Health Antimicrobial Resistance Register. These efforts contribute to strengthening Scotland's ability to respond to emerging environmental challenges with timely, evidence-based solutions.

Tracking impact is complex, but CREW maintains open channels with stakeholders to monitor how outputs are used. Reports on PFAS, water scarcity, and flood resilience have been shared and applied by organisations including SEPA, DWQR, SuDSPlanter, the Forth Rivers Trust, and Diageo, informing internal guidance and broader stakeholder engagement.

Finally, CREW's work continues to shape national policy. Its projects were cited in the National Flood Resilience Strategy, Scottish National Adaptation Plan (SNAP3), and public health guidance on cyanobacteria. Evidence has been shared in the Scottish Parliament, featured in a SPICe blog, and presented at policy roundtables, demonstrating the tangible, real-world value of CREW-supported research.

Photo credit: Linda May

Thank you to all our research teams and project steering groups for their engagement and invaluable input throughout FY2024-25 and beyond!

Register of Expertise

Connecting opportunities and expertise in water science and policy, the Centre of Expertise for Waters (CREW) fosters collaboration between research and decision-making. Our Register of Expertise plays a key role in this effort. Please consider adding your skills and knowledge to the network.

Why should I register

Connect to opportunities

Reach out to colleagues and share your work

Explore skills and find solutions

Widen your network

Register

CREW - Scotland's centre of expertise for waters: Overview | LinkedIn

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@CREW_waters

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For general inquiries and feedback please contact us here: enquiries@crew.ac.uk