

Household flood plans in Scotland – applying behavioural learnings to inform best practice and uptake

The Centre of Expertise for Waters (CREW) intends to commission a **Capacity Building project** aligned with CREW's Hydrological Extremes, Coasts and Risk Management Theme which applies behavioural science evidence to produce a household flood plan template and considers future actions to support uptake.

Background

Flooding in Scotland will become more frequent and severe in the decades ahead, as highlighted in Scotland's National Flood Resilience Strategy. As flooding will be one of Scotland's biggest climate adaptation challenges, it is vital steps are taken to ensure the Scottish population is prepared. The recent Scottish Climate Survey highlights that only 28% of households feel prepared for flooding, although 50% of households expect to experience flooding in the next five years where they live. Additionally, only 3% of households have installed any flood resilience measures and 27% have signed up to receive severe weather warnings or flood alerts. As set out in the Scottish National Adaptation Plan, behavioural change has a significant role to play in ensuring lives and livelihoods are resilient to climate impacts, including flooding¹.

Individual household flood plans aim to support households to prepare for and better respond to occurrences of flooding. Flood plans usually contain advice and checklists of actions to take in the event of a flood, spaces to record important information (e.g. key contact numbers), and scenarios to think through. Evidence suggests that completing a household flood plan is an important gateway behaviour to: building awareness of the risk of flooding; increasing feelings of personal responsibility in the event of a flood, and; further resilience actions, such as installing property flood resilience measures (Behavioural Insights Team, 2021).

In Scotland, several different household flood plan templates are available. These include:

- The Scottish Flood Forum's (SFF) household flood plan;
- Flood plans developed by insurance companies such as Flood Assist;
- A checklist-based <u>personal flood plan</u> provided by The English Environment Agency.

Related tools for household resilience planning are available from SEPA (<u>Before, during and after a flood guidelines</u>) and Ready Scot (<u>online general home emergency plans</u>)².

Work to review several different household flood plan templates and the related behavioural science evidence base is being undertaken by Scottish Government, in consultation with key partners including SEPA and The Scottish Flood Forum (see **Annex A** for some of the documents reviewed). While there are a variety of flood plans available² it was identified that some could 1) have clearer messaging explaining why creating a flood plan is an important action individuals should undertake, 2) account for key barriers to undertaking resilience behaviours (such as creating a flood plan) and 3) be more accessible and easier to find. Overall, there is no single flood plan resource consistently offered to households.

With the overarching aim of increasing the number of households that engage with household flood plans and strengthening the impact of these, a need has been identified to review how behavioural learnings could be applied to inform the design and delivery of household flood plans.

¹ Relevant outputs related to this project and background, including previous CREW projects, are listed in **Annex A.**

² Please see **Annex B** for more flood plan examples.



The Aim

CREW invites proposals for a c.7 month capacity building project to undertake a 2-phase project.

Phase 1 Aim: To apply the latest behavioural science evidence to produce a household flood plan template, which is user tested via community engagement.

Phase 2 Aim: To consider what future actions could support the uptake of household flood plans and increase the number of households completing household flood plans.

The Scope

Phase 1 Scope: It is anticipated that through a <u>rapid evidence review</u> of the latest behavioural science evidence around household flood planning and other related resilience behaviours, and of existing plans, phase 1 of the project will produce a <u>household flood plan template</u>. So that some elements of this household flood plan template can be customised to delivery partners (while the majority of the template remains consistent), the template should be delivered both in a PDF and an editable soft copy. This phase 1 should include <u>user testing of the household flood plan template</u>, through <u>interviews</u> and <u>focus groups</u> with local communities.

Key considerations to the household flood plan template include:

- Key information / checks to be included
- Additional barriers to making a flood plan
- Tone and use of language, and impact of this on anxiety
- Accessibility (e.g. font type and size, colour used, design format)
- Suitable images and visuals to support messaging
- Opportunities for personalising the template to the user (e.g. by property type)
- Formats (digital and/or hard copies)
- Monitoring and evaluation potential (including tracking uptake)

Researcher expertise in behavioural science, participatory engagement research, public health and flooding is required. Strong qualitative research skills and experience in presenting evidence in a range of accessible formats which is tailored to different audiences, is essential for phase 1 of this project.

Phase 2 Scope: It is anticipated that through <u>engagement with public and private sector stakeholders</u> and utilising behavioural science and community engagement insights gained during phase 1, phase 2 of the project will provide <u>recommendations</u> for how household flood plans could be delivered in the future.

Questions to explore include:

- 1. What is the public's awareness around making household flood plans?
- 2. Who benefits the most from having a household flood plan? Should they be targeted at everyone or at key at risk groups? If targeted, how could that be achieved?
- 3. What engagement / delivery mechanisms would increase the uptake of flood plans?
- 4. How is the landscape of household flood plans evolving in Scotland? For example, how do insurance companies envisage employing them in the future, and how may the actions of FloodRe play a role?
- 5. How can we help ensure we do not increase inequalities by encouraging the uptake of these plans?
- 6. Which organisations do the public see as 'trusted messengers' in terms of the delivery of resilience support, such as household flood plans?
- 7. Could there be a connection between community flood plans and household flood plans?

Researcher expertise in behavioural science, participatory engagement research, public health and flooding is essential for phase 2. Strong qualitative research skills is also required.



Deliverables

Phase 1 Deliverables:

- a) Stakeholder engagement³: Paired/solo interviews and/or focus groups (which can be online) with people living in flood-risk areas to user-test the household flood plan template. The sample should include both those who have been flooded before, and those who have not. Other important demographic variables to consider in sampling could be home inhabitants (e.g. young people or not), and tenancy (e.g. property owners vs tenants). Applicants should also consider socio-economic factors. In the proposal, please include details of your proposed sampling strategy. The Scottish Flood Forum can help to facilitate some of the stakeholder engagements.
- b) A report section summarising the latest behavioural science evidence relevant to household flood plans and the community engagement undertaken within this phase (c.10-12 pages).

Phase 2 Deliverables:

- c) Stakeholder engagement³: A workshop and/or focus groups and/or a survey, with organisations who will deliver flood planning interventions. This should include engagement with Scottish Flood Forum and SEPA as well as local authorities across Scotland and insurance companies. The Scottish Flood Forum can help to facilitate some of the stakeholder engagements.
- d) A report section summarising the engagement with public and private sector stakeholders, addressing the questions posed in Phase 2 to provide recommendations for how household flood plans could be delivered in the future. The behavioural science insights gained during phase 1 should be utilised and linkages to phase 1 should be made. (c.10-12 pages)

Overall deliverables (Phase 1 & 2):

- e) A communications and impact plan to help plan and steer the stakeholder engagement undertaken during the project and to consider project impact during and after the project.
- f) A household flood plan template⁴ informed by the latest behavioural evidence and stakeholder engagement undertaken in both phase 1 and 2. This template should include accessible and user-tested questions, infographics/visuals, images. (The template should be provided in both a PDF and editable soft copy).
- g) **One final report** which encompasses both Phase 1 & 2 report sections as well as an overarching executive summary, introduction, recommendations, and conclusion (c.30 pages, excluding appendices)
- h) A plain English Summary (1-2 pages)
- i) Website summary (including image or photograph) (200 words)

Project Meetings/events:

- j) 3-4 Project Steering Group meetings online (throughout the project lifecycle)
- k) Online webinar to present project findings

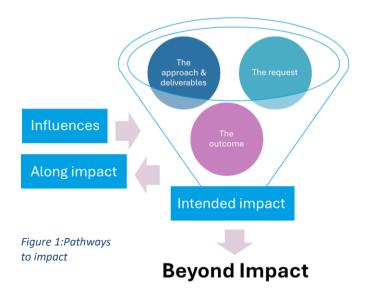
³ The type of stakeholder engagement(s) in phase 1 & 2 should be informed by researcher expertise in participatory engagement research. Justification of the stakeholder engagement(s) methods chosen should be outlined in your proposal.

⁴ A graphic artist/designer should be consulted at an early stage of the project to support and advise on the template structure and style and to assist with the production of attractive and accessible visual/infographics.



Intended impacts

There are multiple pathways for a project to achieve impact, and multiple factors that can impact the project's ability to achieve what it intends to do; both along the project lifecycle (A.IMPACT) and beyond project completion (B.IMPACT) (Figure 1).



The request: the problem or gap.

The approach & deliverables: the methods and the 'outputs'.

The outcome: results – short to mid-term change.

Intended impact: what the project aims to achieve.

Along impact: impact that could occur during the project lifecycle.

Influences: factors that can influence the project.

Beyond impact: wider change that occurs post-project completion.

Along Impact (A.Impact):

- These key stakeholders are anticipated to support this project: Scottish Government, SEPA and the Scottish Flood Forum
- The Scottish Flood Forum can help to facilitate some of the stakeholder engagements in both phase 1 and phase 2 of this project.
- Liaison between CREW: CXC and research teams is envisaged around complimentary projects e.g. a
 CXC project currently in procurement titled 'Communication adverse weather impacts on population
 health and wellbeing.'

Beyond Impact (B.Impact):

The project outputs are intended to contribute towards building resilience to flooding across Scotland by establishing best practice for household flood plans. Designing a household flood plan template informed by behavioural science and public engagement will enable organisations and key stakeholders, who work with and provide advice and support to households, to tailor their response to flood impacted communities through improved emergency planning by updating existing templates. It will also ensure household flood plans are designed in a way that addresses some of the barriers to people engaging with household flood plans and help to embed them in flood vulnerable communities. The final report will provide valuable insights into how the delivery of household flood plans could develop over the coming years, supporting the delivery of Scotland's National Flood Resilience Strategy and Scottish National Adaptation Plan.



Further information for applicants

Eligibility

CREW Capacity Building funding is open to applications from all relevant Scottish HEIs and Research Institutes (approved subcontractors). One eligible organisation must lead the bid, however an eligible organisation can sub-contract work in accordance with the Grant Terms which would include putting in place an appropriate agreement with the relevant sub-contractor(s) (updated December 2022). Any UK based HEI, RI or SME can be sub-contracted. Where successful, CREW funding would be subject to agreement to the CREW Grant Offer Letter and T&Cs ("Grant Terms"). CREW encourages applications from experienced to early career researchers (ECRs) under the supervision and mentorship of experienced researchers.

Expectations and award criteria

A copy of expectations and the award criteria are provided on page 6 and 7 respectively.

Project management

Day-to-day communication will be between the research/review team (the contractor) and a CREW Project Manager and is likely to involve short catchups as agreed.

Pre-contract meeting

A CREW representative, and representatives of Scottish Government, SEPA and Scottish Flood Forum, will meet with the preferred bidder(s) for a pre-contract meeting.

A pre-contract meeting between will take place approximately 6th or 7th of August 2025.

Anticipated timescale (c. 7 months)

- The project will commence approximately **13**th **August 2025**, depending on contract processing and signature
- The intended format of the household flood plan template document including intended structure, style, design, potential images (with photo credits), colours, and ideas for visuals/infographics, should be presented to the project steering group at a Project Steering Group Meeting in early October 2025⁵.
- A first draft of the <u>household flood plan template</u> should be shared with the Project Steering Group for their review and feedback no later than the **21st of November 2025.** *Please allow 2-weeks for the PSG to review and provide feedback.*
- A second draft of the <u>household flood plan template</u> (in its intended format) and a first draft of the <u>final report</u> (which encompasses both Phase 1 & 2 report sections as well as an overarching executive summary, introduction, recommendations and conclusion), <u>plain English summary</u>, and <u>website summary</u> should be shared with the Project Steering Group for their review and feedback no later than the **30th January 2026.** Please allow 2-weeks for the PSG to review and provide feedback.

⁵ A graphic artist/designer should be consulted at an early stage of the project to support and advise on the template structure and style and to assist with the production of attractive and accessible visuals/infographics.



- The research team should present their findings at an online webinar at the end of March 2026.
- All final project deliverables should be submitted for sign off by 31st March 2026.

Funding

The maximum amount of funding available exclusive of VAT (where applicable) is £95,000.

This budget includes associated costs for the hire of a graphic artist/designer.

Submitting a proposal

Please complete a CREW Capacity Building Application form outlining your proposal.

Proposals need to be submitted to <u>Procurement@crew.ac.uk</u> for evaluation by Wednesday 9th July, midday. We aim to notify the successful bidder by c. wb.21st July 2025.

Please contact Procurement@crew.ac.uk by **Tuesday 1st July** if you would like any clarification on any of the above. You should highlight any potential conflicts of interest in your proposal. For queries about what may constitute a potential conflict of interest please contact the CREW Manager (Nikki.Dodd@hutton.ac.uk).

Expectations

No.	Criteria	Descriptor
1	Duration	The proposed duration will align closely to the details provided in the anticipated timescales section of the specification.
2	Staff time and effort	The proposed allocation of staff time and effort is appropriate and includes all deliverables. The proposal provides a commitment that named staff members will be available to work on the contract if the bid is successful. For any unnamed staff, appropriate risk identification and mitigation measures are provided.
3	Project costs	The estimated breakdown of project costs is realistic and inclusive of all milestones/deliverables/activities.

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Award criteria

No.	Criteria	Descriptor
1	Understanding the project ask and policy background	The proposal should include an introduction which demonstrates a clear understanding of the project requirements. This should include an understanding of the policy background and the supporting role of this project; the need for this research; the project aim; and how the proposal will address this aim.
2	Proposed methodology	The proposal should demonstrate a high quality and workable methodology, including how the evidence will be identified, reviewed, and assessed; consulting relevant stakeholders and/or experts where appropriate to address the aim and key questions and, produce the deliverables in the timescales required. It should explain the suitability, robustness, and limitations of the proposed methodology. Please include details (with justification) of your proposed stakeholder engagement(s), including a detailed sampling strategy.
3	Milestones	The project milestones are logical, practical and include all deliverables.
4	Project Management	The staff, resources and expertise are appropriate for conducting the proposed project. The proposal should name the project lead and outline their project management experience.
5	General and specific topic expertise and experience	The proposal should provide details of individual staff members who will work on this project and demonstrate how they will meet the project requirements, specifically: - general research experience and expertise; - specific experience and expertise in participatory engagement research, behavioural science, public health, and flooding is essential. Strong qualitative research skills and experience in presenting evidence in a range of accessible formats which is tailored to different audiences, is also essential. Graphic artist/designer expertise is also required.
6	General communication and deliverables	The proposal should describe the approach to producing the deliverables, which will be published on the CREW website. It should detail who will take lead responsibility for report-writing and overall report quality. It should provide examples of previously published reports and outputs in which they have been involved relevant to this project.
7	Quality assurance	The proposal should provide details of quality assurance procedures to demonstrate how the contract will be continuously delivered to a high standard. It should specifically address issues of quality control at different stages of the project, including evidence gathering, analysis and report writing. It should include a timetable for delivery of tasks, project milestones and allocation of staff and staff time against each task, covering the duration of the contract.
8	Risk	The proposal should provide a risk assessment matrix detailing any risks identified in relation to the delivery of this contract, and proposed mitigation measures to minimise their probability and impact, focused particularly on risk to completion on time.



Annex A – Relevant documents to this project

- Effective future communication of flood risk in Scotland CREW
- Impacts of Flooding in North-East Scotland <u>comprehensive report</u> and <u>summary report</u> CREW
- <u>Building Public Health Resilience to Fluvial Flooding in Scotland</u> CREW
- Applying Behavioural Insights to Support Flood Resilience Behavioural Insights Team (2021)
- <u>Conceptualising Risk Communication Barriers to Household Flood Preparedness</u> Willow Forsyth,
 Tim Roberts, and Graham Brewer (2023)
- 'Climate adaptation' elements of: <u>The implications of behavioural science for effective climate policy</u> (<u>CAST</u>) Climate Change Committee
- Annex C Approach to climate adaptation behaviours Climate change: Scottish National
 Adaptation Plan 2024-2029 Scottish Government
- <u>Identification of maladaptive behavioural patterns in response to extreme weather events</u> Luisa Eusse-Villa et al.
- <u>The intention-behaviour gap in climate change adaptation: evidence from longitudinal survey data</u> Daniel Osberghaus, W.J. Wouter Botzen and Martin Kesternich
- Anchored in place, driven by risk: how place attachment amplifies the household flood adaptation Sungju Han
- Weathering the storm: developing a user-centric weather forecast and warning system for Ireland Gavin D. Brown et al.
- Insurance, public assistance, and household flood risk reduction: a comparative study of Austria, England, and Romania Susanne Hanger et al.
- Why People (Do Not) Adopt the Private Precautionary and Mitigation Measures: A Review of the Issue from the Perspective of Recent Flood Risk Research -Ivan Andrasko

Annex B – Flood Plan examples

- Scottish Flood Forum's Household Flood Plan: <u>SFF-Your-Household-Flood-Plan.pdf</u> (Linked to through Citizens Advice Scotland page: <u>How to prepare for flooding Citizens Advice</u>)
- UK Government's Personal Flood Plan: Personal flood plan GOV.UK
- SSEN's Home Emergency Plan: home-emergency-plan---scotland.pdf
- Ready Scotland's Flood Preparation Guidance: Preparing for rain and flood disruption
- Ready Scotland's Household Emergency Plan: How to plan for a home emergency
- BeFloodReady's Personal Flood Plan Template: <u>Creating a personal flood plan BeFloodReady</u>
- UK Flood Defence Alliance's Personal Flood Plan: Personal Flood Plan UK Flood Defence Alliance
- Argyll and Bute Council's Household Emergency Plan Template: <u>Making your plan | Argyll and Bute Council</u>
- Renfrewshire Council: Prepare your home for emergencies Renfrewshire Website
- Dumfries and Galloway Council: Prepare for emergencies | Dumfries and Galloway Council
- Flood Assist Insurance's Digital Flood Action Plan: <u>Create a Digital Flood Action Plan | Flood Assist Insurance</u>
- The Flood Hub's Household Flood Planning Guide: <u>FT Q R120 Flood Hub Household Flood Planning Guide</u>