



Research into Flood Warnings

This is a survey that aims to explore how people understand and react to flood warnings, to help us prepare before flooding events happen. We hope that you will be able to fill it in.

Glasgow, 2010



Introduction

The Macaulay Land Use Research Institute (www.macaulay.ac.uk) has been commissioned by the Scottish Government to do research that will improve flood risk planning and responses to flood warnings. Our work in Scotland is part of a larger European research project called 'URFlood' aimed at providing guidance on good practice in flood communications. As part of this project, we will be handing out questionnaires across Scotland, some in areas which have been affected by flooding, and some in areas that have not been directly affected.

The aim of this questionnaire is to find out and characterise where and how warnings about floods are received and used. This questionnaire is not only for people who have been flooded: we are interested in everybody's views. It should take about 10-15 minutes to fill in, or longer if you wish to provide us with comments.

Please return the questionnaire to us by popping it into the enclosed FREEPOST envelope (no stamp is necessary).

If you would like to know any more, or have any questions, please contact Andrew Cuthbert on 01224 395139, or e-mail Andrew at a.cuthbert@macaulay.ac.uk.

We will distribute a summary of our findings in October. The provision of your personal details is entirely optional, but allows us to keep you informed about the research (it would not be used for any other purpose). Any information you provide will be anonymised and the data will be held at the Institute in accordance with current data protection guidelines. The summary findings will also be relayed to the Scottish Government and the agencies involved in flood communication systems, to inform them as they consider how best to communicate about flood events.

Thank you for your help, we really appreciate your time.

* If you are a small business owner please tick here
 You can also use this questionnaire, just fill it in for your business property rather than your home and ignore question 2.

1. Questions about your home* and flooding

1) What type of building do you live in?

Bungalow	
Detached house	
Semi-detached house	
Terraced house	
Flat	
Other:	

3) Is your home:

Owned outright	
Owned with a mortgage	
Part owned	
Rented (council)	
Rented (private)	
Other:	

2) How many people live in your household, including yourself?

Adults	
Children	

4) Do you think your home is in a flood risk area?

Yes	
Probably	
No	
Don't know	

5) When you bought or moved into your home, were you told if it was at risk of flooding?

No	
Don't know	
Yes	

→ If you ticked 'yes', who told you that your house was at risk?

Seller/ Landlord	
Estate Agent	
Surveyor	
Solicitor	
Neighbour	
Other:	

6) Have you been affected by flooding at your current home?

Flooding has NOT affected my property	
Flood waters have reached my property but caused no damage	
Flood waters reached my property and caused damage	





→ When was this?

↓
 What do you think was the cause? Tick as many as appropriate.

Coastal Flooding	
Flooding from rivers	
Flooding due to heavy rainfall	
Overflow of drainage system	
Flood defence failure	
Don't know	
Other:	




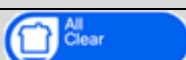
2. Awareness of flood warnings used locally

In past years, SEPA have had a flood warning system with four levels.

Flood watch		Flooding possible. Be aware! Be prepared! Watch out!
Flood Warning		Flooding expected, affecting homes, businesses and main roads. Act now!
Severe Flood Warning		Severe flooding expected, with imminent danger to life and property. Act now!
All Clear		Water levels have peaked and receded

7) Are you familiar with this warning system?

No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Yes	<input type="checkbox"/>

→ If 'yes', how reliable do you feel the flooding predictions are for each stage?	← Reliability →			
		Poor	Okay	Good
		○	○	○
		○	○	○
		○	○	○
	○	○	○	

8) SEPA also has some flooding information on its website, and a flood risk map. Do you know about this, and if so what do you think of it?

	I've not heard of it	I've heard of it	I've looked at it
SEPA website on flooding http://www.sepa.org.uk/flooding.aspx			
SEPA flood map http://www.sepa.org.uk/flooding/flood_map.aspx			

↓

If you've seen it, was the information helpful?				
V. unhelpful	← Okay →			V. helpful
○	○	○	○	○

- 9) "Floodline Warnings Direct" will be SEPA's new warning system from April 2011. This service will send messages free of charge, to registered landlines and mobiles, about flooding in areas covered by SEPA's Flood Warning Schemes. It will guide members of the public to the Floodline recorded telephone service or the website for more detailed information.

	No	Yes
Have you heard of Floodline Warnings Direct?		
Would you register into this new service when it becomes available in this area?		

Floodline
0845 988 1188

- 10) Who would tell you how to find flood warning information (e.g. how would you know where to look)? Please tick as many boxes as appropriate.

From SEPA talks to local community	
Another agency told us about flood warnings	
Neighbours or family told me	
From the media: TV, radio or newspapers	
Other:	
I don't know	

- 11) If you can remember a flooding event here in Glasgow, were you aware of any warnings of predicted floods?

No, I didn't hear about any warnings beforehand	
I don't know if I heard about warnings	
Yes, I heard warnings beforehand	

I can't answer this question because I do not remember any floods in Glasgow



If you ticked 'yes', from whom did you hear the warning? You can tick multiple boxes

What is the most important source of warnings? Please show us by circling the tick.

SEPA ¹	
Radio	
TV	
Newspapers	
Local Authority	
Neighbours	
Family	
Police	
Fire Brigade	
Floodline	
Internet	
Don't know	
Other:	

¹ SEPA = Scottish Environment Protection Agency

12) In *the last 3 months* have you been aware of any flood awareness information given in your area?

No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Yes	<input type="checkbox"/>



If yes, where did this advice come from?

Floodline exhibition trailer	<input type="checkbox"/>
Direct mail via post	<input type="checkbox"/>
Visit to your home	<input type="checkbox"/>
Advertising in local press	<input type="checkbox"/>
Information via community council	<input type="checkbox"/>
Other:	<input type="checkbox"/>

13) In *the last 3 months* did you do any of these things, to learn about flood warning arrangements?

Please tick as many boxes as appropriate.

Visited a trailer about flooding	<input type="checkbox"/>
Read some direct mail	<input type="checkbox"/>
Received a visit from a floodline representatives	<input type="checkbox"/>
Read advertising in the local press	<input type="checkbox"/>
Attended a community council meeting	<input type="checkbox"/>
Other:	<input type="checkbox"/>



3. Judging uncertainty and risk

Scientists and meteorologists try hard to predict where floods will happen, and how bad they will be, but unfortunately it is not an exact science: there is usually some uncertainty associated with predictions. This makes the job of communicating the predictions more challenging. To help with this, we would like to know how some ideas to do with uncertainty are generally understood.

- 14) Floods are sometimes described as ‘a 100-year flood’ or a ‘50-year flood’. Have you heard of these phrases, and what do you understand about them?

I've not heard of it		→ What do you think a '100-year flood' means?	<div style="border: 1px solid black; width: 100%; height: 100%;"></div>
I've heard of it...			
but I don't know what it means!			
I have some idea of what it means.			
I have a pretty good idea of what it means			

- 15) Please indicate whether you agree or disagree with these five statements

	← Agreement →					Don't know
	Very low	Low	Moderate	High	Very high	
I do not understand talk about probabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand how risk is assessed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When communicating warnings it would be good to have more information about the uncertainty associated with the predictions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We get enough information: any more is simply confusing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Messages from authorities use too much technical jargon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A flood magnitude which is likely to be equalled or exceeded on average once in 50 years probably won't occur here in my lifetime.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Feelings about flood warnings

When we hear a message, if we are to pay attention to it, it is important that we trust the source, and that we think the message is reliable and relevant to us. We are interested to know your feelings about the sources of information and the reliability of the messages.

- 16) Warnings about impending floods are likely to come from a public agency or the emergency services.

How *trustworthy* do you think these organisations are, in general?

	← Trustworthiness of agency →				
	Very low	Low	Moderate	High	Very high
SEPA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scottish Water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambulance & medics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Police	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If your feelings about trustworthiness changed during a flooding event, please note how. (There is also space for comments on the next page.)

- 17) You might receive a warning about flooding from these agencies, or passed on via other sources such as the media, or friends and family.

How *reliable* is a message about flooding heard from these sources?

	← Reliability of message →				
	Very low	Low	Moderate	High	Very high
SEPA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scottish Water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambulance & medics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Police	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighbours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floodline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Newspapers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18) Sometimes it is important for agencies to listen to the concerns and needs of local people, during a flood event. Do you have any experience of this?

		I tried to talk to...		Ignored me	Listened a little	Listened well
SEPA			How did they listen?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scottish Water				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire service				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambulance & medics				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local authority				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Police				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other:				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

		In general, how accessible do you think authorities are about floods?	Poor	Okay	V good
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have specific examples of how you feel a response could have been improved, during a flood event, then please add your comments in the space below.

5. Responding to warnings about floods

19) If you heard a warning about a flood in this area, who would you tell?
Please tick as many boxes as appropriate.

SEPA	<input type="checkbox"/>	Neighbours	<input type="checkbox"/>
Radio	<input type="checkbox"/>	Family and Friends	<input type="checkbox"/>
TV	<input type="checkbox"/>	Nobody	<input type="checkbox"/>
Newspapers	<input type="checkbox"/>	Others:	<input type="text"/>
Local Authority	<input type="checkbox"/>		

20) Have you received any practical advice, about how to *prepare* for a flood?

No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Yes	<input type="checkbox"/>

→ If you ticked 'yes', where did this advice come from?

SEPA	<input type="checkbox"/>
Scottish Water	<input type="checkbox"/>
Fire service	<input type="checkbox"/>
Ambulance & medics	<input type="checkbox"/>
Local authority	<input type="checkbox"/>
Police	<input type="checkbox"/>
Family or friends	<input type="checkbox"/>
Neighbours	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Other:	<input type="text"/>

→ And was it helpful or useful advice?

No	Some use	Useful	Don't know
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Why?

21) Do you have any other comments or ideas about the provision of information and advice about actions to take during a flood?

6. Acting to prepare for a flood

This page is concerned with actions you might take after receiving a flood warning.

If have been flooded, please start at the top of this page (Q 22) and ignore Q 23.

If you were not flooded, please skip to the last question (Q 23).

22) If you were flooded: did you take any actions *to prepare* for the coming flood?

No: I didn't know it was coming		→ Why?	Please tick all that apply	
No, I had warning but I didn't do anything			There was no time to act	
Yes, I took action			I did not know what to do	
			I was panicked	
			Don't know	
			Other:	

Did you take any of these actions to *prepare* for the flood?

Please tick all that apply

Move items of sentimental value		Contact friends/ family for advice	
Move or protect costly things (e.g. fridge, furniture)		Move myself and others to a safe place e.g. upstairs	
Block doorways/ airbricks		Move pets /livestock to a safe place	
Put flood-boards or flood-gates in place		Move cars to a safe place	
Prepare for loss of power (candles/ torches)		Collect clothing, food, water or medication	
Switch off gas/ electricity		Help neighbours	
Block toilets		Evacuate property	
Watch the water levels		Other:	
Listen to TV/radio for more information			
Check the SEPA website or Floodline			

23) If you have not been flooded: what actions do you think you might do *to prepare* for a coming flood, if you received warning of a flood likely to affect your property?

Move items of sentimental value		Contact friends/ family for advice	
Move or protect costly things (e.g. fridge, furniture)		Move myself and others to a safe place e.g. upstairs	
Block doorways/ airbricks		Move pets /livestock to a safe place	
Put flood-boards or flood-gates in place		Move cars to a safe place	
Prepare for loss of power (candles/ torches)		Collect clothing, food, water or medication	
Switch off gas/ electricity		Help neighbours	
Block toilets		Evacuate property	
Watch the water levels		Other:	
Listen to TV/radio for more information			
Check the SEPA website or Floodline			

7. Your ideas about how flooding information should be delivered

24) How would you rate the amount of information about floods that is available?

	← Amount of information→			Don't know
	Too little	Fine	Too much	
Warnings about floods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Actions to take	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25) How would you prefer to receive information about floods?

Please tick as many as necessary.

Please circle the tick for the method you most prefer.

	Flood warnings	Actions to take
Phone call		
Text to Mobile Phone		
Website		
E-mail		
In-person visit		
Radio		
TV		
Public announcement (e.g. tannoy)		
Other:		

26) Is there additional information that you would like to receive, other comments or ideas about how flooding information should be delivered?

8. Questions about you

27) Are you....?

Male		Female	
------	--	--------	--

28) What is your age?

_____ Years

29) Is English your first language?

Yes		→ If you ticked 'no', how would you describe your English skills?	Fully fluent	
No			Very good	
			Intermediate	
			Beginner	

30) What best describes your employment status?

Employed full-time	
Employed part-time	
Self-employed	
Unemployed	
Retired	
Homemaker	
Studying / training	
Other:	

31) What is your educational experience?

Primary school	
Secondary school	
Sixth form	
HND or similar	
Bachelors-level degree	
Masters or postgraduate degree	

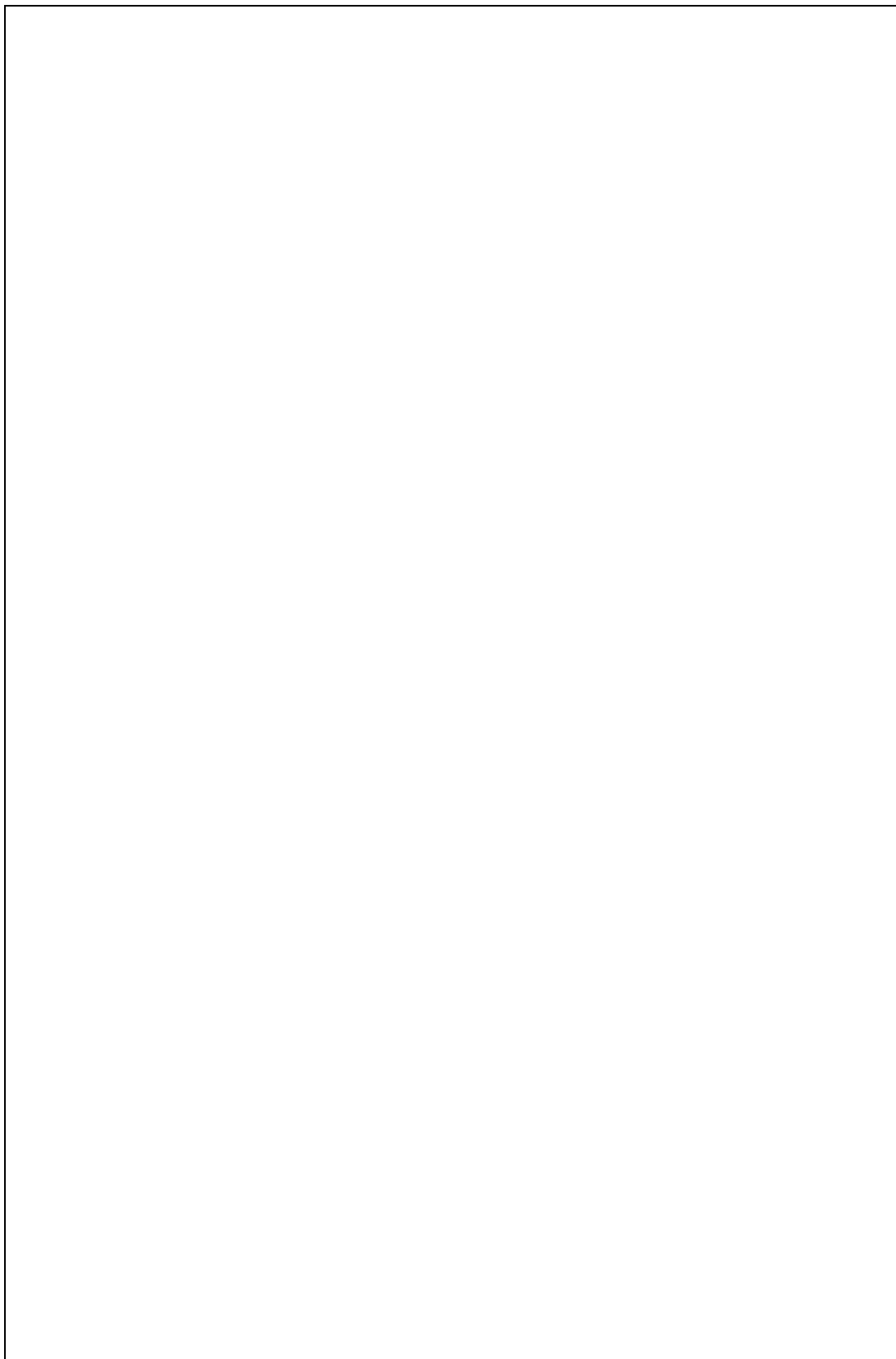
32) How long have you lived in your current location?

_____ Years

33) Would you be interested in participating in a small group discussion on flood warning systems in this area?

Yes	
Maybe	
No	

Do you have any additional comments?

A large, empty rectangular box with a thin black border, intended for the user to provide additional comments. The box is currently blank.

34) Optional: personal details

Please fill this in if you are interested in participating in a small group discussion, or would like to receive a summary of our research findings.

Name	Title: Forename Surname:
Address	Postcode:
Telephone(s)	
Email	
Preferred contact method / time	

Thank you very much for your answers



Craigiebuckler, Aberdeen
AB15 8QH UK

TEL: +44 (0) 1224 395000

FAX: +44 (0) 1224 395010

macaulay.ac.uk



INVESTOR IN PEOPLE

