

Public Flood Survey 2013 to 2014

Report prepared for the Environment
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Defra and the Environment Agency
work in partnership to help reduce
the risk from flooding through the
application of robust evidence

Background, objectives and methodology

- ❑ Over five million properties in England are at risk from flooding from rivers, seas and surface water. The latest climate projections indicate that sea levels will rise, and there will be increasingly severe and frequent rainstorms. This means the risk of floods will increase.
- ❑ The Environment Agency works with its professional partners and the public:
 - to manage risk and reduce the probability of flooding and coastal erosion
 - to reduce the consequences of flooding and coastal erosion
- ❑ The Environment Agency carries out community engagement work in specific 'at risk ' areas. Its purpose is to:
 - raise awareness of flood risk
 - encourage the public to take action and prepare in advance of flooding
- ❑ This survey supports the ongoing evaluation of the Environment Agency's work with the 'at risk' population and with the specific Community Engagement Areas (CEAs).
- ❑ Ipsos MORI was commissioned to conduct the 2014 survey. Similar surveys have been conducted since 2011.

- ❑ The **main objectives** of this survey are to understand:
 - how aware the 'at risk' public is of flooding and their own flood risk
 - what action they have taken to prepare for flooding (see below)
 - how the Environment Agency can help improve their resilience to flooding
- ❑ The Environment Agency's communications and engagement work encourages people 'at risk' to take the following **five key actions**.
 - Check whether their property is in an area at risk of flooding.
 - Sign up to the Environment Agency's flood warning system, Floodline Warnings Direct (FWD).
 - Think through/prepare a flood plan.
 - Invest in suitable flood protection.
 - Join a local community flood group.
- ❑ The survey was originally planned for February 2014 but was postponed until May 2014 due to the winter floods in 2013 to 2014. **Revised objectives** were agreed after the decision to postpone fieldwork.
 - Because of the time lag, as well as the wider 'noise' created by the media coverage of the winter floods, the survey no longer sought to determine the impact of the Environment Agency's Flood Action Campaign.
 - Emphasis shifted to understanding how those affected by the winter floods viewed the Environment Agency and the ways in which they had responded to any warnings they had received.

Methodology: sample sources and telephone matching

- ❑ A total of 795 householders at risk of flooding in England were interviewed by telephone for 15 minutes between 6 and 30 May 2014. All survey respondents were solely or jointly responsible for household decisions.
- ❑ The Environment Agency provided three different databases for sampling.

Sample file	Description of sample	Number of interviews
Address at Risk	This database included all addresses at risk of river and coastal flooding which was used to conduct interviews with ‘at risk’ non-CEA respondents . Addresses from the CEA and Flooded sample files were excluded from the database.	501
Community Engagement Areas (CEAs)	This file included areas where community engagement activity had taken place. The location information was supplied by Resilience teams within Environment Agency Regions.* This information needed to be sufficiently detailed to enable accurate targeting of interviews. Most of the information that contained the necessary level of detail was from Midlands Region (see slide 8). Addresses in the Flooded sample file were excluded.	254
Flooded	This file included postcodes of properties the Environment Agency believed had been flooded over winter 2013 to 2014. The reason for using this sample file was to boost the number of interviews conducted in flooded areas.	40

- ❑ Where possible, telephone numbers were added to the addresses from the three databases using information in the Electoral Register and publicly available telephone numbers. In line with previous experience with this survey, 10% of the addresses selected were successfully matched to telephone numbers.

* The survey was commissioned before the Environment Agency moved on 1 April 2014 from a ‘region’ to an ‘area’ structure.

Methodology: achieving a more representative sample

- ❑ The telephone matching process is known to introduce bias into the sample (that is, those addresses with telephone numbers). This is because about 45% of people opt out of the 'open' version of the Electoral Register and only a certain proportion of those remaining will have a publicly available number. The overall impact is that younger people and renters (who move home more frequently) are less likely to be represented in the sample.
- ❑ This issue affected previous flood awareness surveys where 65% of the sample was aged 55+. This survey aimed to achieve a more representative sample through the use of quotas or targets based on population profiles.
- ❑ Census information was used to create a demographic profile of the 'at risk' population. This profile was used to set quotas (or targets) for the number of interviews to be conducted by age, gender and working status. Quotas were also set depending on region and the level of risk of flooding (from the Address at Risk database).
- ❑ The risk level quotas were skewed towards medium and high risk to reflect the focus of the Environment Agency's resources and activities.
- ❑ It was not possible to meet the quota for the 18–34 age group due to the bias introduced by the telephone matching process. Consequently, a new quota was set for 18–54 year olds. This helped ensure the sample was more representative of the 'at risk' population than previous surveys.
- ❑ Weighting was applied to ensure the profile of the final sample was in line with the revised quota targets (see Appendix for further details). It was not applied to correct the disproportionate sampling of region and risk level due to the impact on effective sample sizes.

☐ This report presents findings for four main sample groups.

Sample group	Number of interviews	Details
Overall	795	<p>This group is broadly representative of the entire ‘at risk’ population of England.</p> <p>The interviews from the CEA and Flooded databases were down-weighted in line with the proportion of ‘at risk’ addresses they account for (8% and <1% respectively).</p>
CEA	254	<p>This group includes interviews from the CEA database.</p> <p>When CEA location information was requested from regional teams they were busy responding to the winter floods and therefore not all regions were able to provide this information. Most of the interviews (87%) were from Midlands Region. This is because other regions were unable to provide sufficiently detailed information of their CEAs to allow interviews to be targeted.</p> <p>As the CEA interviews are mainly drawn from Midlands Region, they cannot be considered to be representative of wider engagement activity and should be treated as indicative only. As such they are reported separately from the main commentary at the end of each section.</p>
Non-CEA	501	<p>This group is the general ‘at risk’ population and accounts for the majority of interviews. The interviews are drawn from the Address at Risk database, excluding those addresses on the CEA and Flooded databases.</p>
Flooded	65	<p>This group is based on those who had been flooded in the 12 months prior to the survey. It includes 40 interviews from the Flooded database as well as 19 interviews which occurred in the non-CEA and CEA samples.</p>

- ❑ The Overall sample group is broadly representative of the 'at risk' population of England. However, it is not fully representative for the following reasons:
 - Risk level: the survey oversamples areas at medium and high risk, as this is where the Environment Agency focuses its resources.
 - Region: the sample was split equally among former Environment Agency regional boundaries to allow regional reporting. This is not representative of the 'at risk' population.
- ❑ The report presents weighted findings for the Overall, CEA and Flooded sample groups. Results are not presented for the 'at risk' non-CEA group as they account for 91% of the Overall group. Consequently the findings are consistent between these two sample groups.
- ❑ The proportion of those flooded in the CEA sample is lower than might be expected (12% compared with 17% Overall). This is in contrast to the 2012 to 2013 survey when CEA respondents were more likely to have been flooded than the Overall sample (24% compared with 17%). Previous research for the Environment Agency shows that flood experience shapes wider attitudes and behaviours around flood risk. Therefore, the lower level of flooded properties is likely to have an impact on the findings for the CEA sample.
- ❑ There is no clear explanation for the lower proportion of flooded addresses in the CEA sample. While addresses from the Flooded database were removed from the CEA database, they accounted for less than 1%. Nor does it appear to be due to the high proportion of addresses from Midlands Region in the CEA sample.

Reporting the results: comparing the findings between sample groups and with the 2012 to 2013 survey

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- ❑ The commentary highlights any differences between the Overall and Flooded sample groups, as well as other demographic sub-groups.
 - Only differences that are statistically significant are included. This means we can be 95% confident that the difference reflects an actual difference in the population as opposed to being a consequence of surveying a 'sample' of respondents – as opposed to everyone.
- ❑ As the CEA interviews are drawn mainly from Midlands Region, they cannot be considered representative of wider engagement activity. As such the findings from these interviews are reported separately from the main commentary at the end of each section of the report. For the same reason, the differences highlighted between the CEA and Overall sample groups should be treated with caution.
- ❑ For the most important questions, the findings are compared with those from the previous year's flood awareness survey. However, there are several reasons why these comparisons should be treated with caution.
 - Sample profile: although this survey is not representative of the 'at risk' population and was not intended to be, it uses quotas to achieve a more balanced sample than in the previous surveys. For example:
 - Those aged 55+ accounted for 65% of the sample in 2013 compared with 34% in 2014.
 - Respondents in high risk areas represented 60% of the sample in 2013 compared with 35% in 2014.

Analysis of the responses shows that both these factors have an impact on the findings but that age does so to a greater extent. The ways in which these factors might impact on comparisons between the 2014 and 2013 surveys are discussed in the commentary.

 - Questionnaire revisions: some questions were added, while others were reworded and/or re-ordered.

Conclusions

How aware are the 'at risk' public of flooding and their own flood risk

- ❑ Over half of those surveyed (54%) did not believe they were at risk of flooding and 29% of those flooded in the last 12 months did not believe they were at risk prior to the event.
- ❑ This suggests there is a continued need for communications and engagement work to challenge perceptions of risk.

What is the 'at risk' public doing to prepare for flooding

- ❑ There is a need to continue to push preparations as uptake is mixed. While over half of those surveyed had found out if they were at risk, only a third had signed up for flood warnings or prepared a flood plan.
- ❑ Although it is necessary to treat comparisons with the previous flood awareness surveys with caution (see methodology), there is evidence to suggest that the preparedness of those at risk of flooding has increased since the previous year's survey across four of the five key actions. This could be linked to the extensive media coverage of the winter floods enabling wider promotion of these steps, while also making them more salient among those at risk of flooding.
- ❑ There is a strong relationship between having received advice and support on flood risk and having made preparations. This suggests the advice provided (from a variety of sources) is making a difference.

How the Environment Agency can help improve resilience to flooding

- ❑ The Environment Agency is the organisation that was 'top of mind' for most of those surveyed when thinking about flooding. There is also evidence to suggest its profile has increased since the 2012 to 2013 survey. However, local councils and water companies were also widely mentioned by respondents, suggesting they have an important role in providing information, advice and support to the public.
- ❑ Advice and support is being provided through multiple channels. Social media is part of the mix when it comes to pushing information but did not feature in terms of where people would think to look for it. The majority of respondents still 'received' information through more traditional media. That said, the internet and primarily the Environment Agency's website were 'top of mind' among respondents when it came to searching for information,
- ❑ Those who had visited the Environment Agency (or GOV.UK) website or had viewed the flood maps felt the experience was a positive one. Respondents generally agreed they trusted the information and that it was easy to understand and pertinent. This positive experience should help to reinforce the Environment Agency's online presence as the destination point for flood risk information. However, the experience of those flooded in the last 12 months was not as positive and it might be worth exploring their expectations, needs and perceptions further.
- ❑ There is an audience, typically older people and those from the lower social grades, which cannot or do not want to access information online and require other forms of support. They are more likely to look to their local council to provide this.
- ❑ In general, flood warnings were seen as credible and the majority of respondents took action in response to them. In addition, those who received warnings through Floodline Warnings Direct were more likely to view the Environment Agency as trustworthy and effective. Encouraging further engagement with the service should help enhance the Environment Agency's reputation.

Flood experience and perceptions of risk

□ Flood experience

- In the Overall sample group, 17% of respondents had experienced a flood at their current home. This finding is similar to the previous year's survey.
- Half (51%) of those who had experienced a flood in their home said it was at least five years ago.
- Around one in four (24%) said their most recent flood was within the last year.

□ There is a continued need to raise acceptance of flood risk.

- Over half of all respondents did not believe they were at risk of flooding, even though all those contacted were at risk. This finding is similar to the 2012 to 2013 survey.*
- Of those flooded in the last 12 months, 69% considered themselves to be at risk compared with 45% respondents Overall.
- Those at high risk (53%) were more likely to think they were at risk than those at medium (42%) or low risk (36%).
- Respondents with children (under 18) were more likely to feel at risk (51%) than those without (39%).
- Respondents in the higher AB social grades were more likely to consider themselves at risk (51%) than respondents Overall (45%). Those in social grade C2 (33%) were less likely.

* Care should be taken when making comparisons with the 2012 to 2013 survey due to the changes in the sampling approach to achieve a more representative sample (see methodology). If a consistent approach had been used, we might have expected an increase in those who felt at risk. This is because the 2013 to 2014 survey included a lower proportion of high risk respondents, who are more likely to view themselves as at risk.

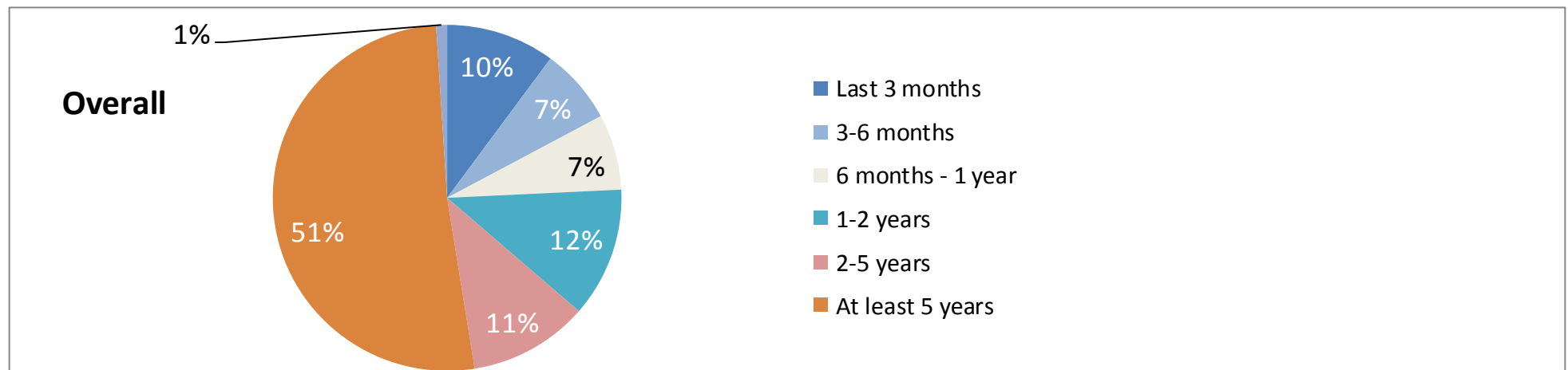
17% of respondents in the Overall group had experienced a flood at their current home.

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- ❑ This figure is similar to the previous year's survey. Of these, half were flooded more than five years ago and a quarter were flooded in the last year.

Q5 *Has any part of your own home ever been flooded by water coming in from outside, other than rain leaking through the roof?*

Q6 *When was the most recent time this happened?*



Base: All who had been flooded: 155

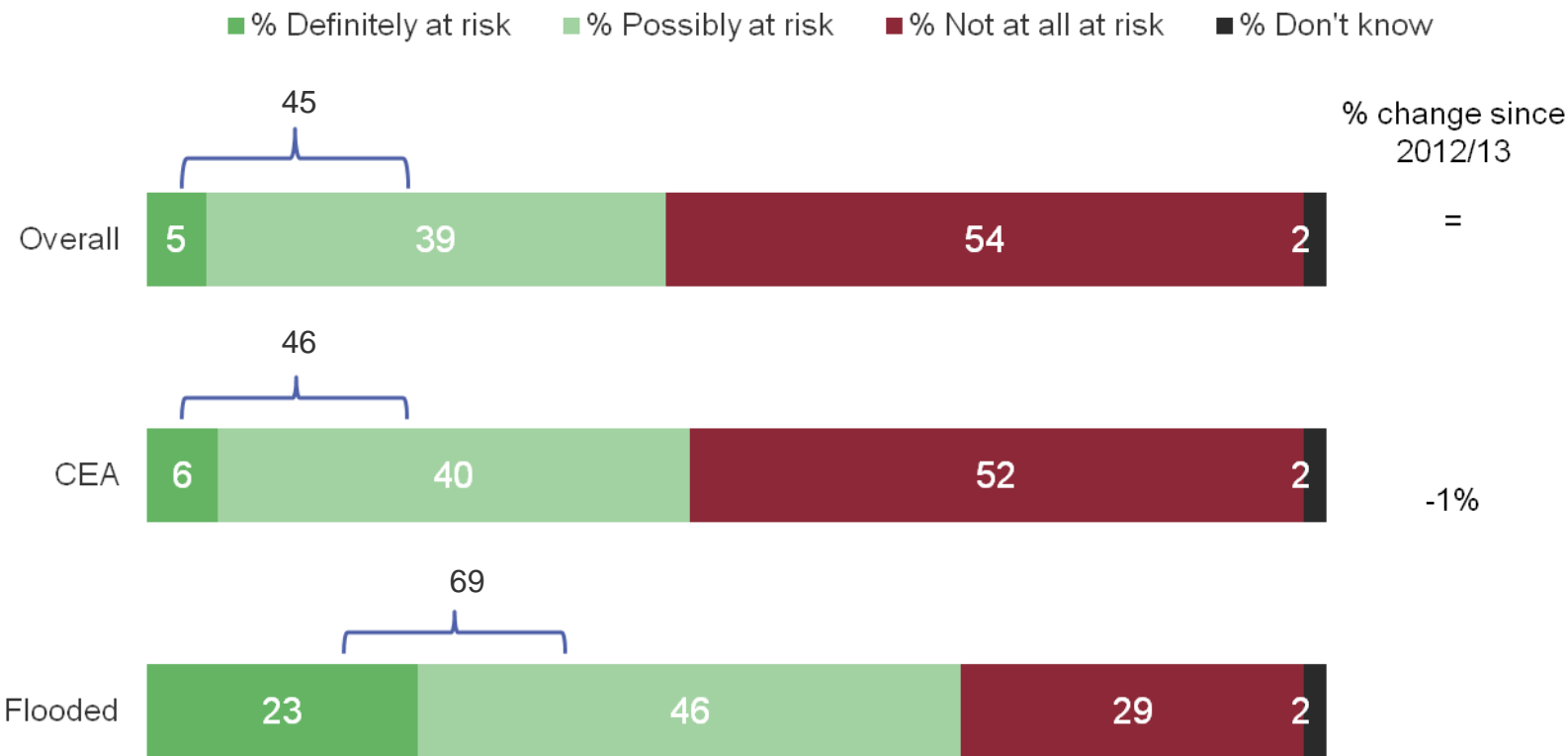
Over half of all respondents did not believe they were at risk of flooding.

❑ This finding is similar to that in the 2012 to 2013 survey.

Q7. You have told us that your property has previously been flooded, before this happened did you believe your property was:

Q8. Do you believe your property is at risk of flooding? Do you believe it is... ?

The chart shows a combination of Q7 and Q8 to present perceived flood risk for the full sample, both for those who had and hadn't been flooded.



Bases – all respondents. Overall: 795; CEA: 254; Flooded: 65

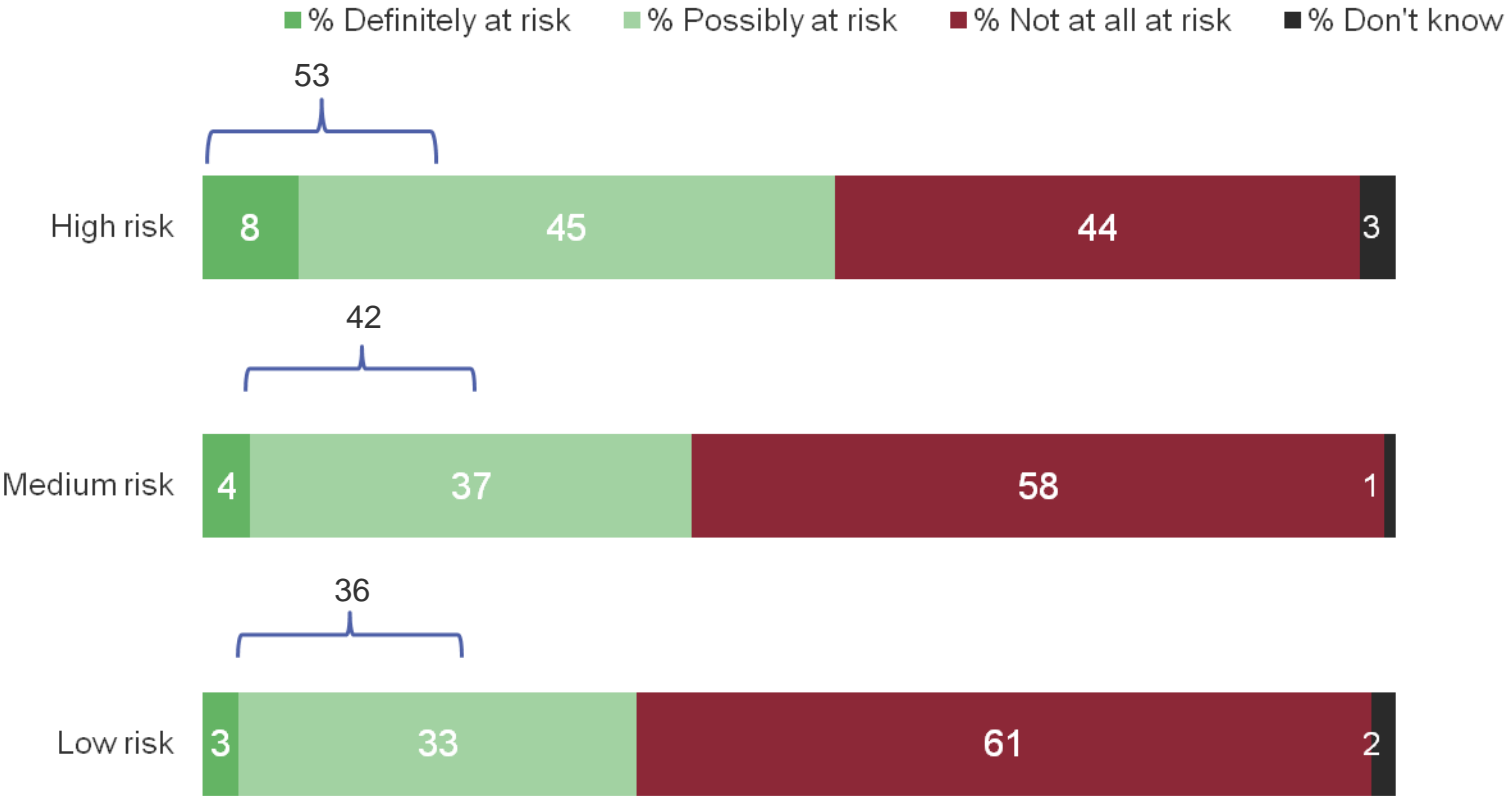
Those in high risk areas were more likely to think they were at risk than those at medium or low risk of flooding.

☐ This indicates the importance of continuing to raise awareness and acceptance of flood risk.

Q7. You have told us that your property has previously been flooded, before this happened did you believe your property was:

Q8. Do you believe your property is at risk of flooding? Do you believe it is... ?

The chart shows a combination of Q7 and Q8 to present perceived flood risk for the full sample, both those who had and hadn't been flooded.



Bases – all respondents. High risk: 281; Medium risk: 263; Low risk: 251

- ❑ Respondents living in the CEAs were less likely to have been flooded (12%) than respondents Overall.
 - This is in contrast to the previous year's survey when respondents living in the CEAs were more likely to have been flooded than respondents Overall (24% compared with 17%).
 - Previous research for the Environment Agency shows that flood experience shapes wider attitudes and behaviours around flood risk.
 - Therefore the **lower level of flooded properties** is likely to have an impact on the findings for the CEA sample.
- ❑ Perceptions of risk between the CEA sample and respondents Overall are consistent.

Flood actions



Key findings: five key actions on flood preparation

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- ❑ **69% of respondents had taken one of the five key actions. This compares with 62% in the 2012 to 2013 survey.***
 - This is despite the fact that perception of risk has remained consistent. One possible explanation is that the media coverage of the winter floods has encouraged respondents to take action.
- ❑ **Communications and engagement need to continue to encourage uptake of the five key actions beyond finding out if you are at risk of flooding.**
 - Most respondents (56%) had found out if their home is at risk of flooding but uptake of other key actions was lower:
 - 37% had signed up for flood warnings
 - 34% had thought through or prepared a flood plan
 - 21% had bought flood protection equipment
 - 9% had joined a community group for flooding
- ❑ **Uptake of each of the key actions is higher than in the 2012 to 2013 survey, with the exception of joining a community group.**
 - In addition, respondents were more likely to say they 'ought to':
 - sign up to Floodline Warnings Direct (25% versus 14% last year)
 - prepare a flood plan (25% versus 19% last year)
 - join a community group (21% versus 14% last year)

* Care should be taken when making comparisons with the 2012 to 2013 survey due to the changes in the sampling approach to achieve a more representative sample (see methodology). If a consistent approach had been used, we might have expected an increase in those who felt at risk. This is because the 2013 to 2014 survey included a lower proportion of high risk respondents, who are more likely to view themselves as at risk.

❑ Experience of flooding encourages people to take action.

- People who had been flooded in the last year were much more likely to take all the five key actions.
- Those flooded in the last 12 months were more likely to have 'bought flood protection equipment' (64%) than those flooded more than one year ago (52%).
- Respondents who had been indirectly affected by flood events were also more likely to take action.
- Of those who had not been flooded but knew of properties in their area that had, 82% were more likely to take action than those with no experience of flooding at home or in their area (58%).

❑ There are a number of other demographic differences in terms of uptake of the five key actions.

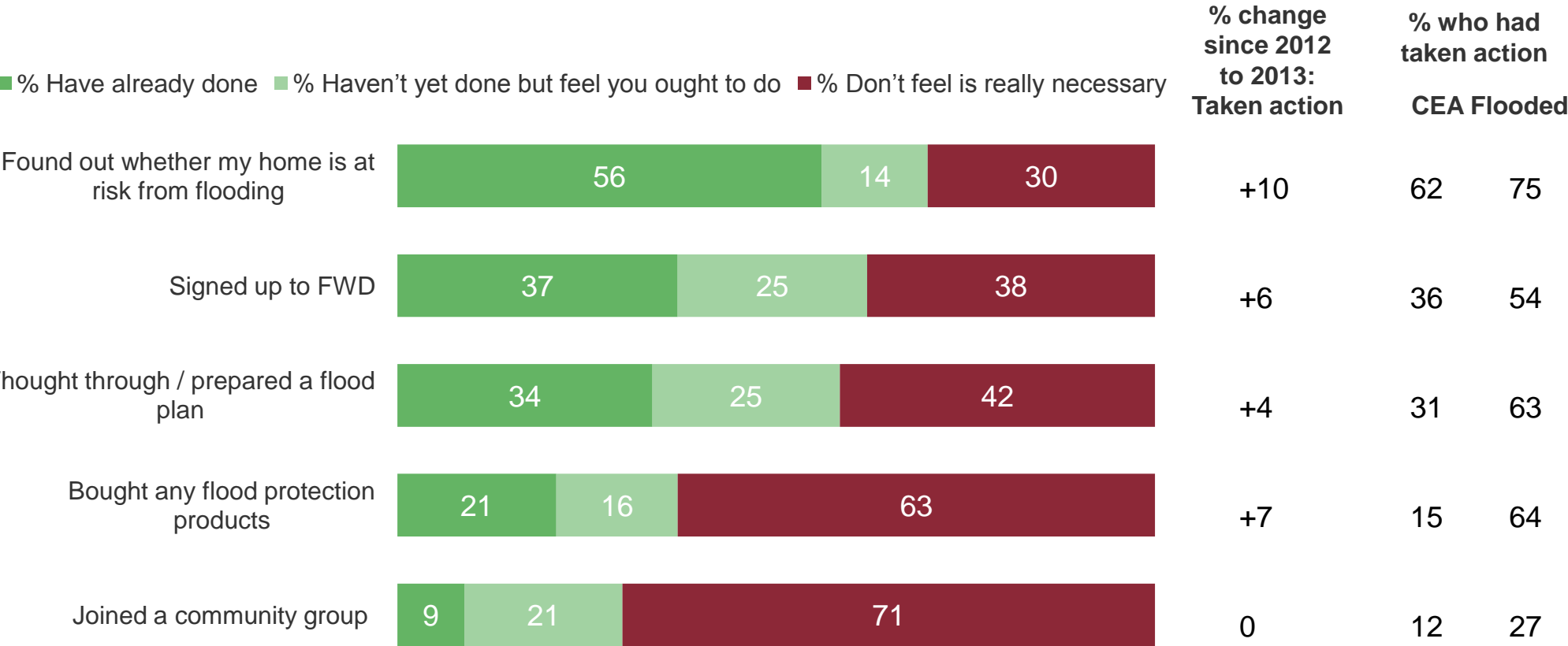
- Those who had received advice or support were more likely than respondents Overall to have taken all five key actions.
- Those who lived in high risk areas were more likely than respondents Overall to have taken all five key actions.
- Those who perceived themselves to be 'at risk' were more likely than respondents Overall to have taken all the key actions with the exception of joining a community group.
- Higher social grades (AB) were more likely to have taken at least one of the five key actions than respondents Overall, while lower social grades (C2 and DE) were less likely. In particular, higher social grades (ABs) were more likely than respondents Overall to have found out if they were at risk, while lower social grades (DE) were less likely to have registered for Floodline Warnings Direct.
- Younger people (aged 18–34) were less likely than respondents Overall to have registered for flood warnings or joined a community group.

69% of respondents had taken one of the five key actions.

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❑ This compares with 62% in the previous year’s survey. Communications and engagement need to continue to encourage uptake of the five actions beyond finding out if you are at risk of flooding.

Q21. Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you:

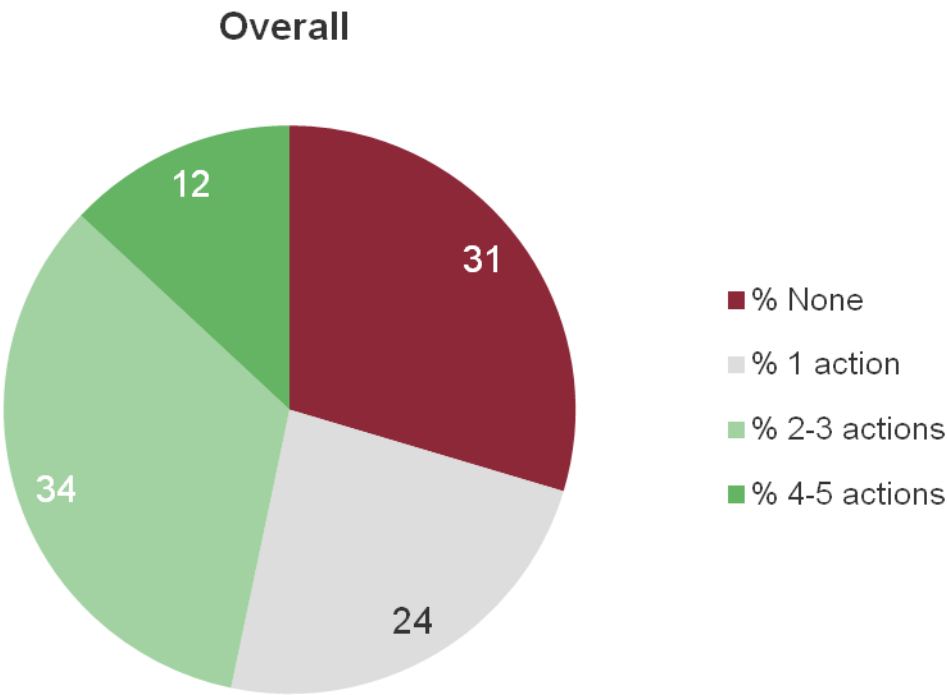


Bases – all respondents. Overall: 795; CEA: 254; Flooded: 65

69% had taken at least one key action to prepare for a flood.

Q21. Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you have already done, haven't done yet but feel you ought to do, or don't feel is really necessary

Number of key actions taken per respondent:

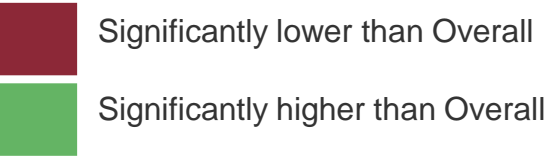


69% had taken at least one key action

People living in high risk areas and people who had received advice were more likely to have taken all five key actions. Younger people and lower social grades were less likely to have taken some of the key actions.

Q21. Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you have already done, haven't done yet but feel you ought to do, or don't feel is really necessary

% Already done: Bases: All respondents, shown in brackets	Overall (795)	Actual flood risk level			Age			Social grade				Received advice	
		High (281)	Medium (263)	Low (251)	18-34 (72)	35-54 (455)	55+ (268)	AB (274)	C1 (116)	C2 (166)	DE (167)	Yes (253)	No (530)
Found out whether my home is at risk from flooding	56	63	52	53	53	56	58	66	63	43	50	77	47
Signed up for FWD	37	46	31	33	17	38	42	43	40	31	28	65	25
Thought through / prepared a flood plan	34	41	32	25	30	33	35	34	40	30	31	53	25
Bought any flood protection products	21	29	20	11	23	20	23	20	24	17	23	30	17
Joined a community group	9	12	7	6	1	9	11	11	7	6	8	15	6
Taken at least one key action	69	79	63	63	60	70	70	77	74	61	61	90	60



❑ Uptake of other actions (beyond the key five) varied.

- More than half of respondents had:
 - checked what insurance cover they had
 - put documents and valuables in a safe place
 - found out if flood warnings were available in their area

❑ There is a significant opportunity to encourage uptake of a number of actions.

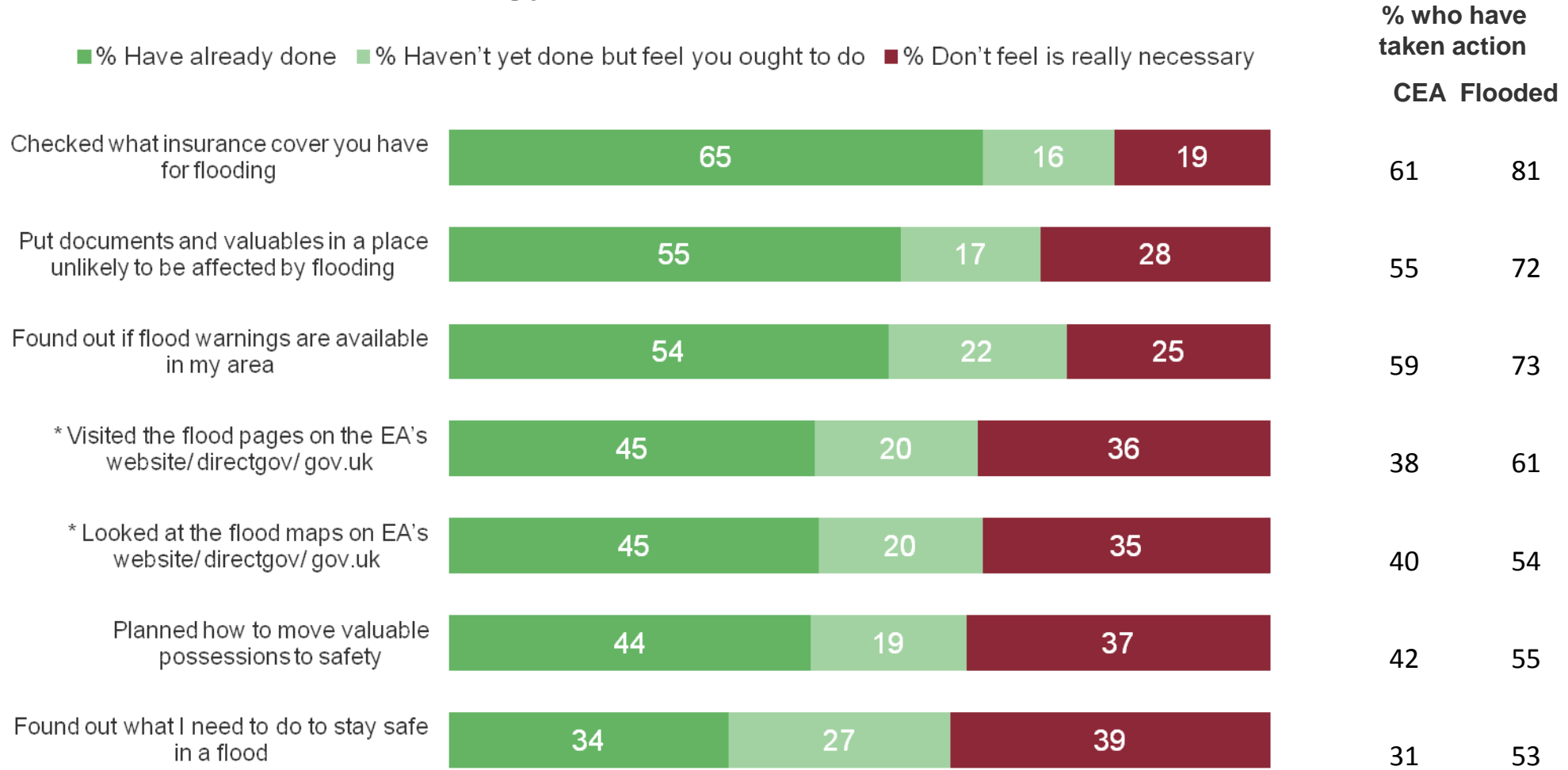
- These are the actions where at least 30% of respondents had not taken action but felt they 'ought to'. They included:
 - preparing a kit of essential items
 - Making a list of important telephone numbers
 - finding out about the Environment Agency's flood warning codes

❑ Experience of flooding encourages uptake of these wider actions.

- Those who had been flooded in the last 12 months were much more likely than respondents Overall to have taken all the potential actions listed in the survey.

Uptake of other actions (beyond the key five) varied. But more than half had checked what insurance cover they had, put documents and valuables in a safe place, and found out if flood warnings were available in their area.

Q21. *Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you:*

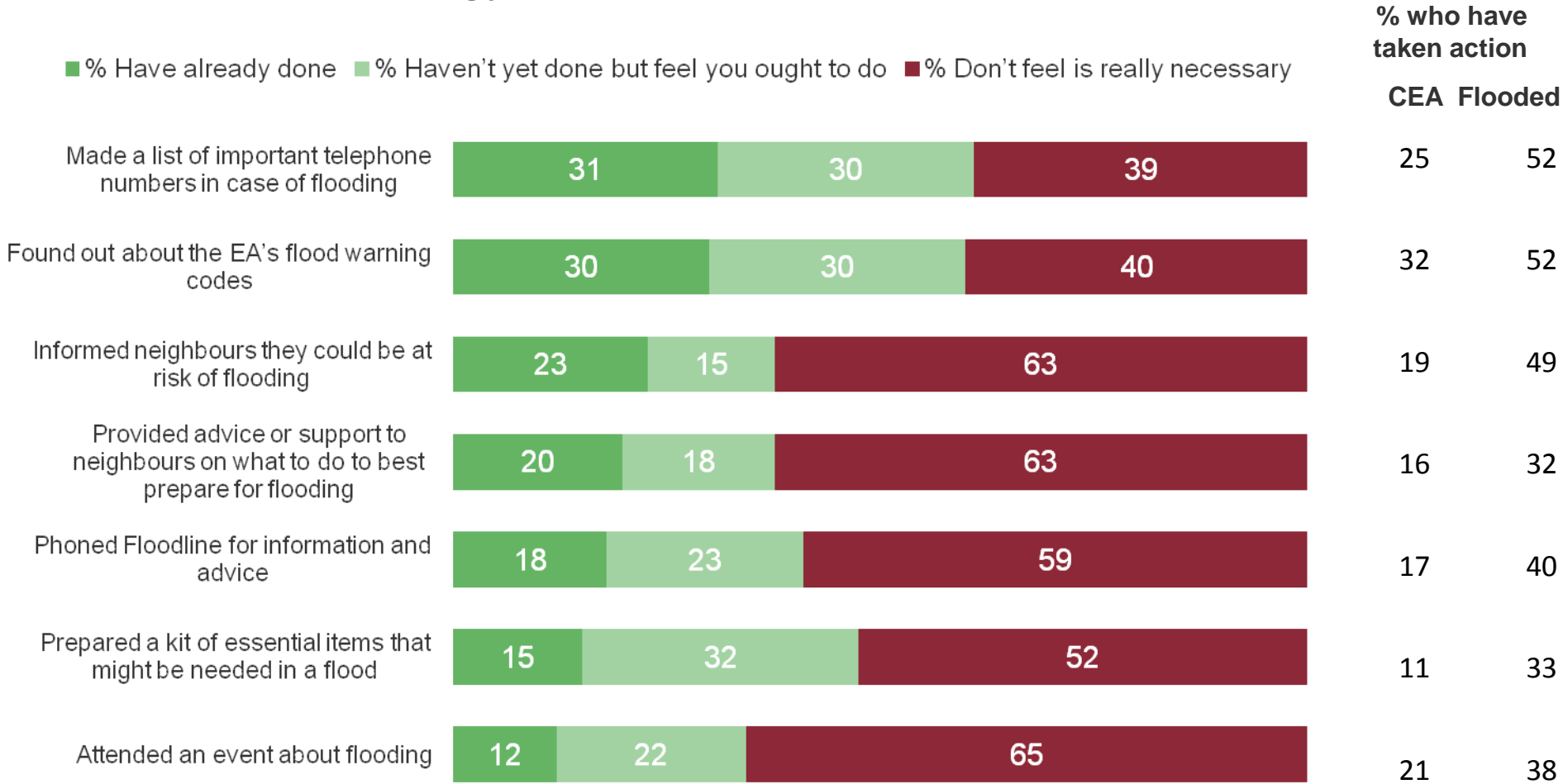


Bases – all respondents. Overall: 795; CEA: 254; Flooded: 65

* Base is all internet users. Overall: 682; CEA: 215; Flooded: 57

There are a number of actions where there is a clear opportunity to encourage uptake. They include preparing a kit of essential items, making a list of important telephone numbers and finding out about the Environment Agency’s flood warning codes.

Q21. *Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you:*



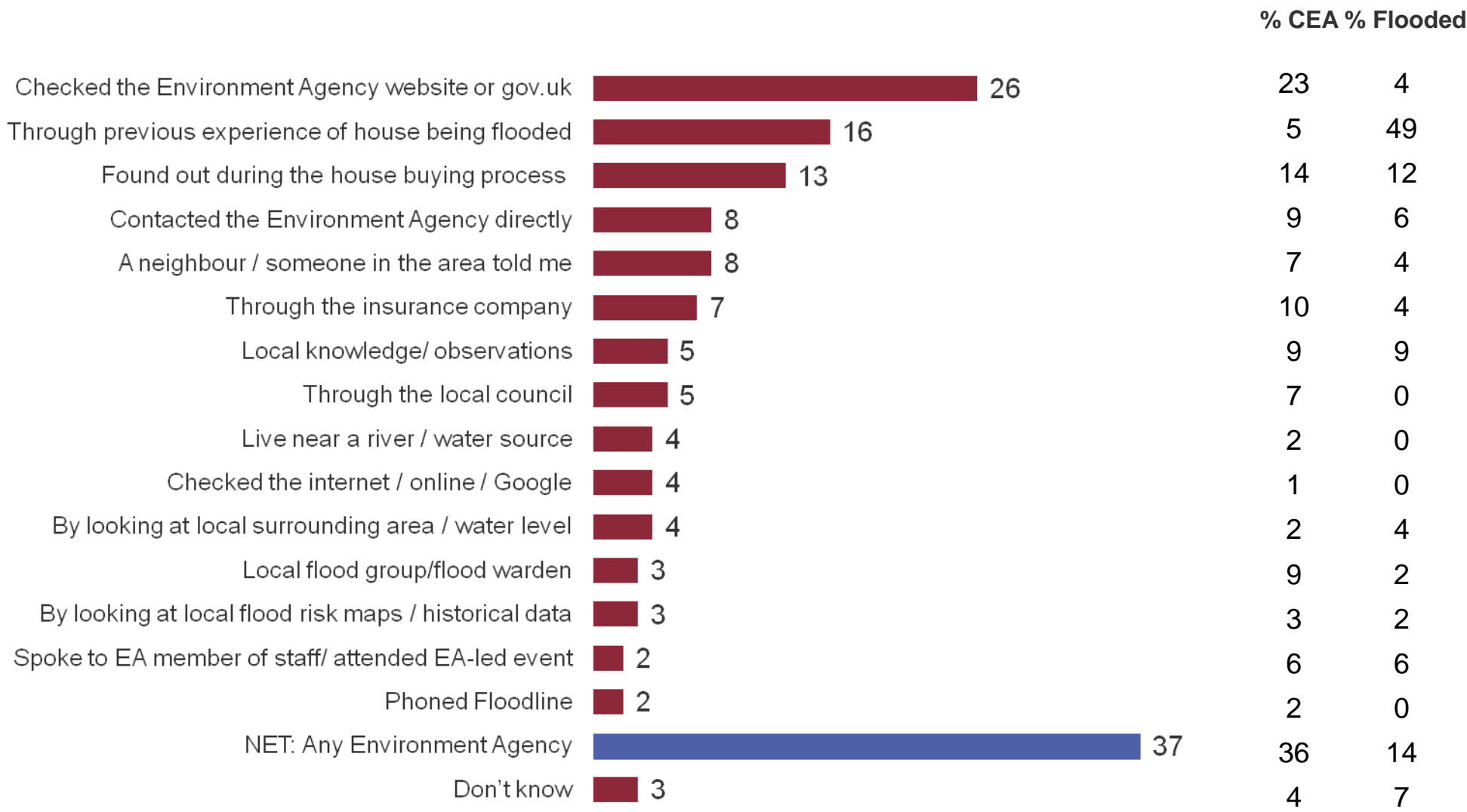
Key findings: how people find out they are 'at risk'

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- ❑ **The Environment Agency's services are important in supporting those 'at risk' determine their flood risk status.**
 - Those respondents who reported having found out if they were at risk were most likely to say they did this through Environment Agency sources (37%).
 - Other key sources were through their previous experience of being flooded (16%) or during the home buying process (13%).
- ❑ **Many people don't find out they are at risk until it's too late.**
 - 49% of those flooded in the last 12 months found out they were at risk through direct experience of flooding. This experience might not necessarily have been the most recent one – they may have been flooded before then.

Many people don't find out they are at risk until it's too late (that is when they are flooded). Over a third found out their flood risk status through Environment Agency services (37%) such as its website (26%).

Q22. You mentioned that you have found out if your property is at risk of flooding. How did you do this?



Bases – all who have found out if their property is at risk of flooding. Overall: 471; CEA: 158; Flooded: 49

□ There are clear opportunities to further improve uptake of actions to prepare for flooding.

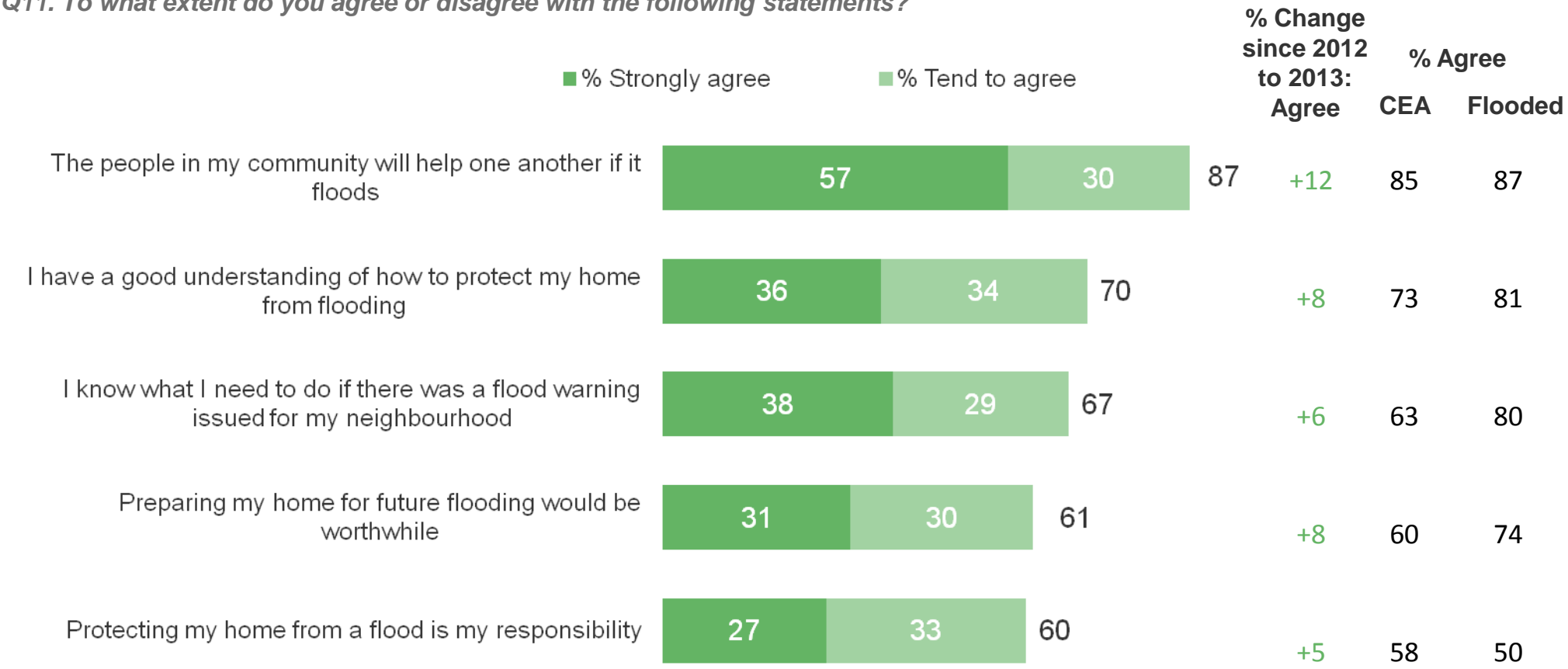
- Most respondents agree that taking action is worthwhile (61%) and acknowledge it is their responsibility (60%).
- The proportion who agree with both of these statements has increased since the previous survey. This indicates that the winter floods may have positively affected public perceptions about the value of taking action to prepare.
 - People who have been flooded in the last year were more likely to agree than respondents Overall that preparing their home is worthwhile. This reinforces the Environment Agency's wider message that action can be taken to limit damage.
 - Attitudes on whether action is worthwhile and whether it is the public's responsibility to take action were consistent across the different demographic groups.

□ Most of the 'at risk' public feel confident about their ability to respond to a flood.

- 70% agreed they had a good understanding of how to protect their home.
- 67% felt they knew what to do in case of a flood warning.
- 87% agreed their community would help one another out if it was flooded.
 - Agreement with these statements has generally increased since the previous year.
 - People who had been flooded in the last year were more likely than respondents Overall to agree that they knew what to do in case of a flood warning.
 - Those living in high risk areas were more likely to agree they knew how to respond than respondents Overall, while those in lower risk areas were less likely to.
 - Younger households appear to need more support in how to respond to a flood. They were less likely than respondents Overall to know how to respond to a flood warning, while older people were more so.

There are clear opportunities to further improve uptake of actions to prepare for flooding. Most respondents agreed that taking action is worthwhile and acknowledged it is their responsibility. Most of the ‘at risk’ public also felt confident about their ability to respond to a flood.

Q11. To what extent do you agree or disagree with the following statements?



Bases – all respondents. Overall: 795; CEA: 254; Flooded: 65

Few demographic differences on attitudes to flooding were found. Younger people, and those at low risk, were less confident in their own knowledge to respond. Younger people in particular might require more support.

Q11 . To what extent do you agree or disagree with the following statements?

% agree: Bases: All respondents, shown in brackets	Overall (795)	Actual flood risk level			Age			Social grade			
		High (281)	Medium (263)	Low (251)	18-34 (72)	35-54 (455)	55+ (268)	AB (274)	C1 (116)	C2 (166)	DE (167)
The people in my community will help one another if it floods	87	87	87	88	85	86	91	87	92	89	83
I have a good understanding of how to protect my home from flooding	70	74	67	68	59	71	71	68	74	75	69
I know what I need to do if there was a flood warning issued	67	74	65	59	49	66	74	69	69	65	63
Preparing my home for future flooding would be worthwhile	61	65	60	56	66	61	59	60	63	62	60
Protecting my home from a flood is my responsibility	60	62	58	58	57	58	64	58	64	56	60



Significantly lower than Overall



Significantly higher than Overall

□ The winter floods appear to have affected the extent to which the public feel their area is at risk and whether they might be flooded in future.

- The proportion who thought their area was at risk of flooding had increased by 18 percentage points since the previous survey to 55%.
- Even though the proportion who believed their own home was at risk is consistent with the previous survey, among these respondents the percentage who believed their property was at risk of flooding and who thought it might flood in the next five years had increased by 8 percentage points to 30%.
- This might reflect a reluctance by respondents to accept their own personal risk, and what this means for them, while accepting the broader risk to their area.
- Those who had been flooded in the last 12 months were more likely than respondents Overall to feel their area is at risk and that they would be flooded again.
- Those in high risk areas and higher social grades (ABs) were more likely than respondents Overall to feel their area is at risk.
- Older people were more likely than respondents Overall to agree they would flood in the next five years.

Key findings: attitudes to flood risk, defences and climate change (cont'd)

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❑ There is broad confidence in flood defences.

- 58% of respondents expressed confidence in flood defences. This is an increase of 5 percentage points on the previous year.
- Those who had been flooded in the last 12 months were more cautious. They were less likely to be confident in flood defences and more likely to feel there needed to be greater investment.

❑ It is possible that the winter floods have encouraged respondents to make a link between flooding and climate change.

- There was a 9 percentage point increase on the previous year in the proportion of respondents who felt that flooding is linked to changes in the climate (69%). The link between the winter flood events and attitudes to climate change are being explored in more depth in a survey commissioned by Cardiff University.
- Agreement was lower among those flooded in the last year than respondents Overall.
- 18–34 year olds were more likely than respondents Overall to agree there is a link between flooding and climate change.

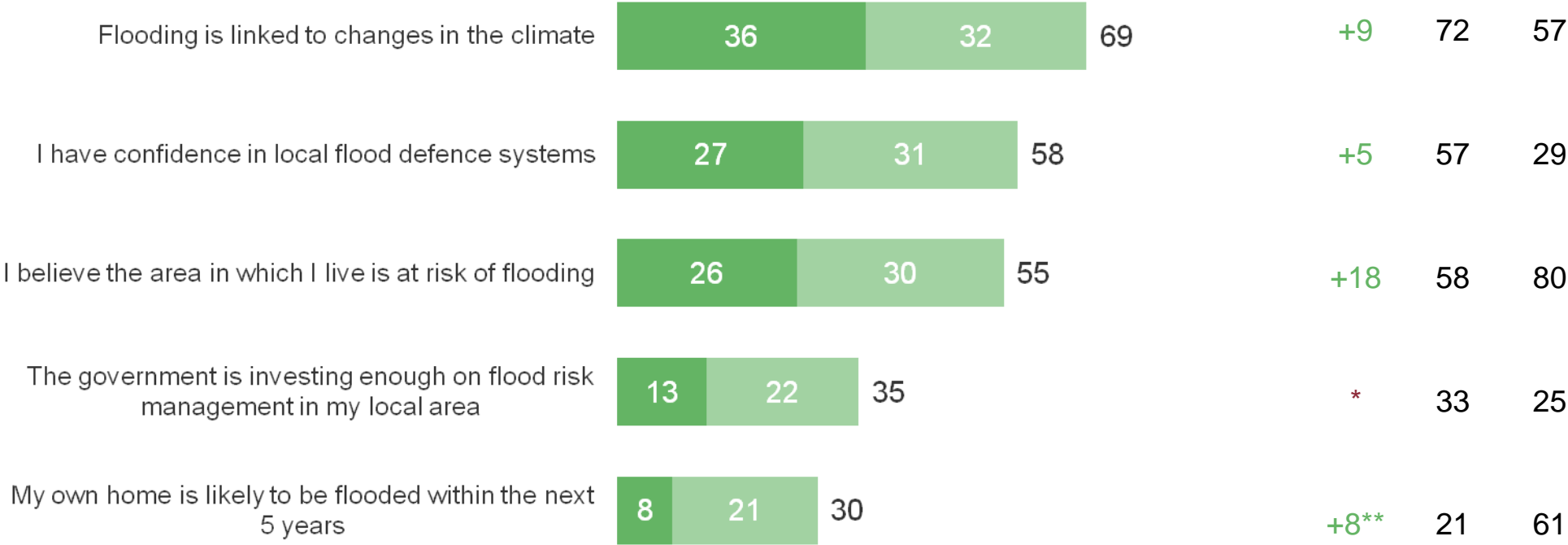
The winter floods appear to have affected perceptions of risk. Respondents were more likely to feel their area is at risk or that they would be flooded in the next five years. More than half were confident in local flood defence systems, but there was a call for greater investment.

36

Q10. To what extent do you agree or disagree with the following statements?

■ % Strongly agree ■ % Tend to agree

% Change
since 2012
to 2013:
Agree % Agree
CEA Flooded



Bases. Statements 1–4: all respondents.
Overall: 795; CEA: 254; Flooded: 65
Statement 5: all who believe their property is at risk of flooding.
Overall: 369; CEA: 120; Flooded: 45

* Comparison is not valid because the question wording then was ‘The government is **not** investing enough on flood risk management in my local area’.
** In the previous survey, the question was asked of all respondents, of whom 11% agreed. For a valid comparison to this year’s results it was necessary to only include those who believed their property is at risk of flooding; 22% of these agreed and hence the like for like increase is 8%.

There were some demographic differences on attitudes to flooding. Those at low risk expressed more confidence in their local flood defences and were less likely to feel there is a need for greater investment in defences.

Q10. To what extent do you agree or disagree with the following statements?

% agree: Bases: All respondents, shown in brackets	Overall (795)	Actual flood risk level			Age			Social grade			
		High (281)	Medium (263)	Low (251)	18-34 (72)	35-54 (455)	55+ (268)	AB (274)	C1 (116)	C2 (166)	DE (167)
Flooding is linked to changes in the climate	69	69	67	70	86	68	64	70	71	68	68
I have confidence in local flood defence systems	58	56	52	70	57	60	55	59	56	57	57
I believe the area in which I live is at risk of flooding	55	64	54	45	54	57	53	64	51	50	54
The government is investing enough on flood risk management in my local area	35	31	33	42	34	37	31	36	38	34	30
My own home is likely to be flooded within the next 5 years (Base: all who believe their property is at risk of flooding, shown below each figure)	30 (369)	32 (150)	20 (116)	23 (103)	30 (38)	25 (205)	39 (126)	28 (140)	16 (57)	39 (62)	30 (72)



Significantly lower than Overall



Significantly higher than Overall

- ❑ **There is mixed evidence on whether engagement activity has encouraged uptake of key actions in the CEA sample.**
 - The survey found that respondents in CEAs were:
 - more likely (63%) than respondents Overall (56%) to have found out if their home is at risk of flooding
 - more likely to have joined a community group (12% compared with 9%)
 - less likely to have bought flood protection products (17% compared with 21%)
- ❑ **There is mixed evidence on whether or not engagement activity has had a positive impact in the CEA sample in terms of uptake of actions beyond the five key ones.**
 - The survey found that respondents in CEAs were:
 - more likely than respondents Overall to have checked if warnings were available and attended an event about flooding
 - less likely to have visited the flood pages on the Environment Agency's website, made a list of important telephone numbers and prepared a flood kit

- ❑ **There is evidence that Environment Agency engagement activity has helped support those in CEAs to find out if they are at risk.**
 - Although the general pattern was similar, those in CEAs were more likely to have found out about their flood risk from the following sources, which are generally linked to engagement activity:
 - local flood groups / wardens (9% compared with 3% of Overall respondents)
 - speaking to Environment Agency staff or attending an Environment Agency event (6% compared with 2% Overall)
 - from a leaflet or direct mailing (4% compared with 1% Overall)
- ❑ **The findings for attitudes and confidence in ability to prepare for a flood are consistent between respondents in CEAs and respondents Overall.**
 - However respondents in CEAs were less likely than respondents Overall to feel they would be flooded in the next five years. To some extent this reflects the fact that the CEA sample was less likely to have been flooded to date.

Flood warnings and response to flooding

Key findings: receipt of flood warnings and sources

41

❑ Flood victims seemed more likely to have received a warning in response to the winter floods than during previous flood events.

- Of those respondents whose home had ever been flooded, 29% had received a warning about it.
- This figure rises to 52% of all respondents who were flooded in the last 12 months.
- This suggests the warning system was more effective in the recent floods than in previous events. However this could be due in part to people being more likely to remember a warning if it was more recent.

❑ Floodline Warning WD is a key channel of flood warnings.

- 69% of those who had received a flood warning did so via one of the FWD methods. In the main this was through a call to their landline* (58% of those who had received a warning).
- Very few respondents received warnings from social media (1%) or a community group (1%).
- Respondents in the higher AB social grades (20%) and those with children living at home (20%) were more likely than respondents Overall to receive a warning via SMS. This indicates a higher level of engagement by these groups with the FWD service, as they must pro-actively register their mobile number to receive text alerts.

* However there could be a bias in the sample as all those interviewed have publicly available landline numbers - those excluded could be more likely to use a mobile for example.

Key findings: receipt of flood warnings and sources

42

- ❑ **Flood victims seemed more likely to have received a warning in response to the winter floods than during previous flood events.**
 - Of those respondents whose home had ever been flooded, 29% had received a warning about it.
 - This figure rises to 52% of all respondents who were flooded in the last 12 months.
 - This suggests the warning system was more effective in the recent floods than in previous events. However this could be due in part to people being more likely to remember a warning if it was more recent.
- ❑ **Floodline Warnings Direct is an important channel of flood warnings.**
 - Of those who had received a flood warning, 69% did so via one of the FWD methods. In the main this was through a call to their landline* (58% of those who had received a warning).
 - Very few respondents received warnings from social media (1%) or a community group (1%).
 - Respondents in the higher AB social grades (20%) and those with children living at home (20%) were more likely than respondents Overall to receive a warning via a text message. This indicates a higher level of engagement by these groups with the FWD service, as they must pro-actively register their mobile number to receive text alerts.

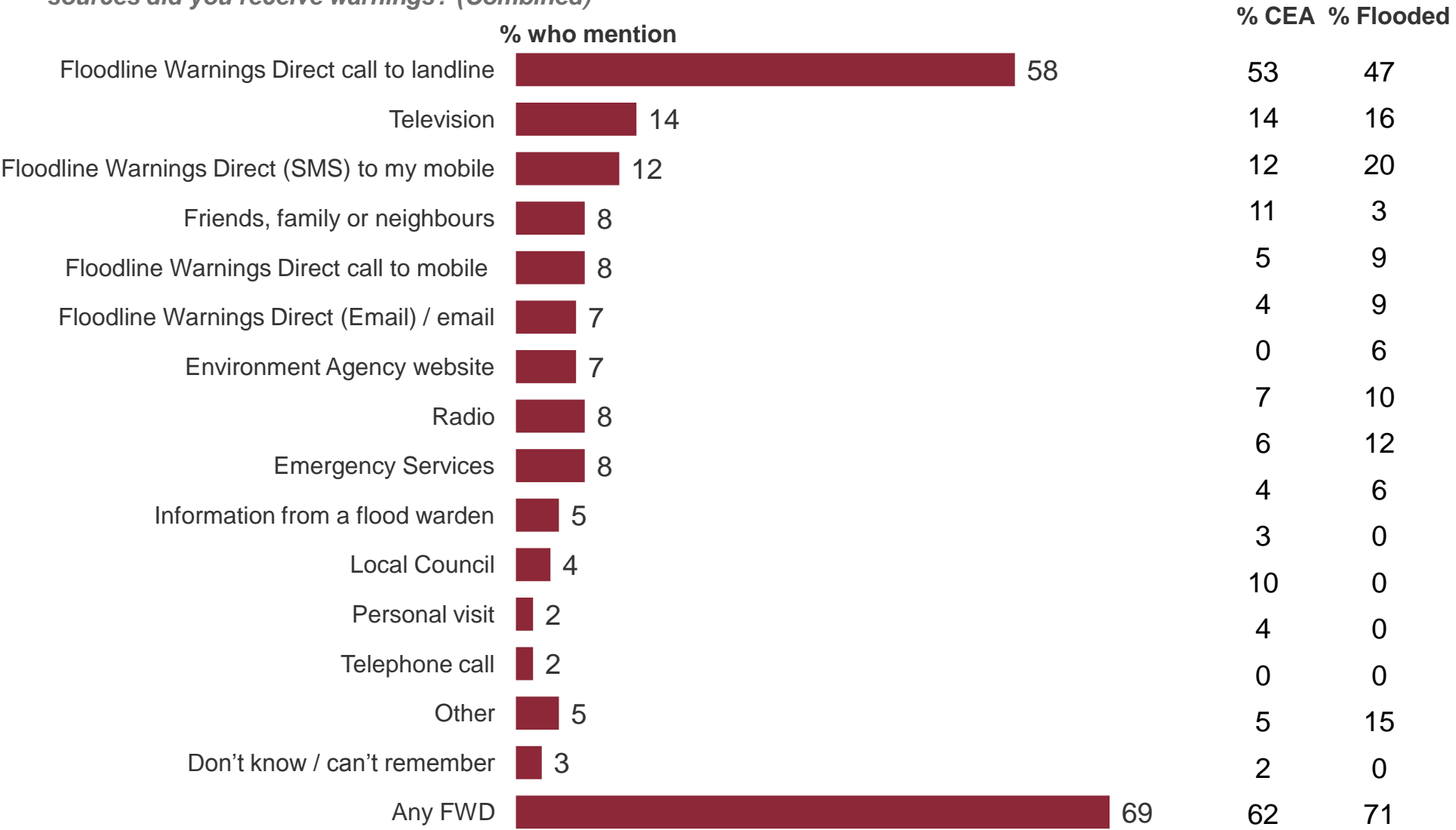
* There could be a bias in the sample as all those interviewed had publicly available landline numbers. Those excluded could, for example, be more likely to use a mobile phone.

□ The majority of respondents believed the flood warnings they received.

- Almost two-thirds (63%) felt the flood warning they received meant there was a risk of flood water reaching their property.
- Belief in flood warnings correlates strongly with perceived flood risk. Of those respondents receiving a flood warning, 72% of those who think they are at risk believed it compared with 44% of those who think they are not at risk.
- The credibility of warnings issued via Floodline Warnings Direct is consistent with other means of receiving flood warnings. Of the respondents who received a warning via FWD, 63% believed the warning as did 65% of those who received a warning through another source.

Floodline Warnings Direct is crucial in warning the public about flood events, but is also supported by broadcast media. Social media is yet to register as a means of disseminating flood warnings.

Q27/28. Thinking about the most recent flood warning, how did you first receive it? From which, if any, other sources did you receive warnings? (Combined)



Bases – all who received a flood warning. Overall: 254; CEA: 67; Flooded: 34

Key findings: action in response to flood warnings

45

❑ Most people take notice of flood warnings.

- Two thirds (66%) of those who received a flood warning took action in response to it, twice the number that took no action (34%).

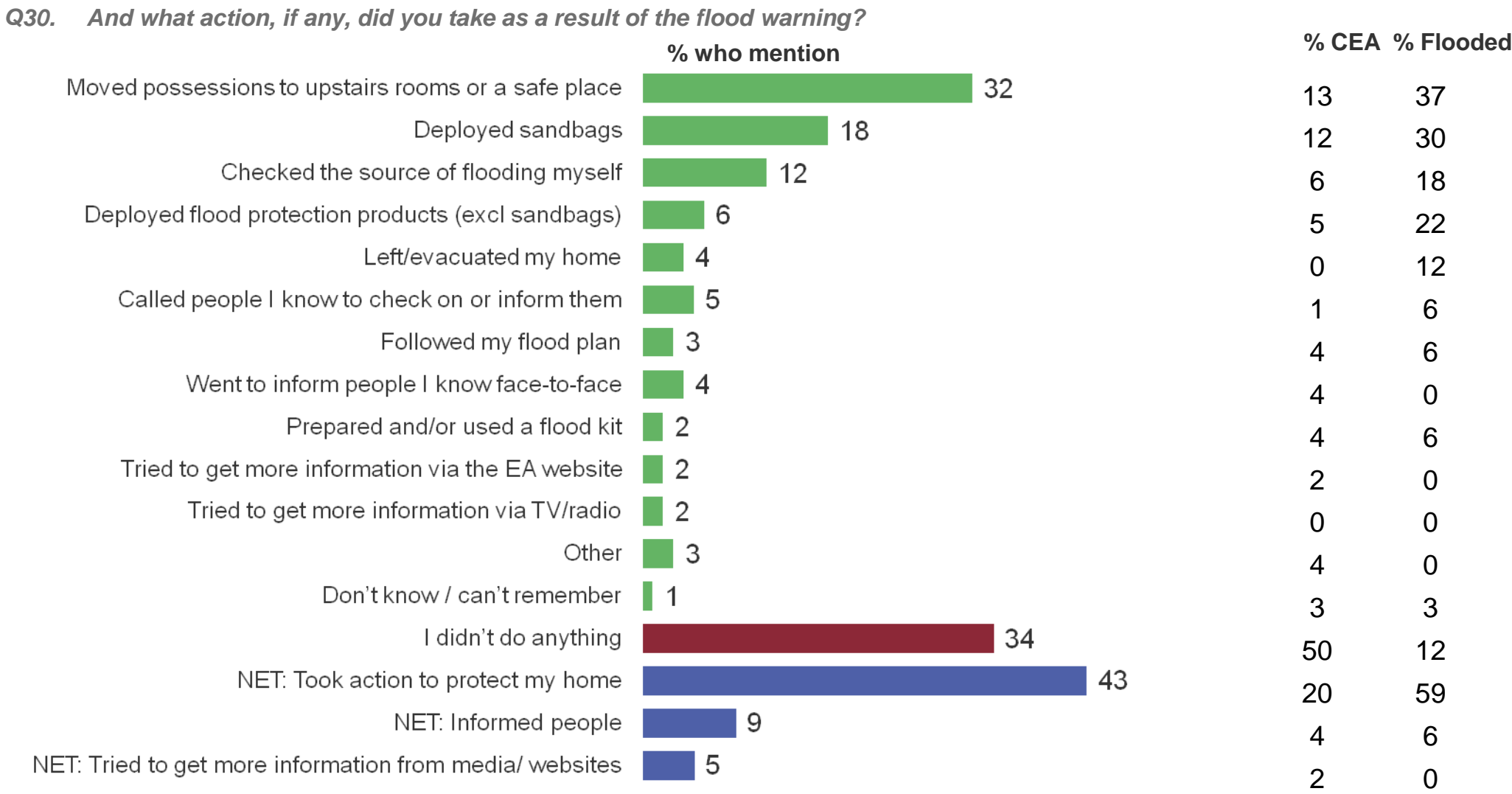
❑ The actions most commonly taken in response to flood warnings were to protect the home.

- In particular this included moving possessions upstairs or deploying sandbags.
- Those who were flooded in the last year were much more likely to deploy flood protection than those who had not (22% versus 6%).
- Those who received the warning from Floodline Warnings Direct were more likely to follow a flood plan than those who received it from another source (6% versus 0%).
- Those who thought flood protection was their own responsibility were more likely to check the source themselves (20% versus 12% respondents Overall).

❑ Barriers to action are linked to the perceived credibility of the warning or flood risk.

- Respondents who took no action tended to say this was because they did not believe the warning (40%) or that they did not think the situation was serious enough (37%).

Most people take notice of flood warnings. Two-thirds of those who received a flood warning took action in response to it.



Bases – all who received a flood warning. Overall: 254; CEA: 67; Flooded: 34

Barriers to action are linked to the perceived credibility of the warning and the perceived impact of the event.

Q31. You said you took no action. What were the reasons for this?



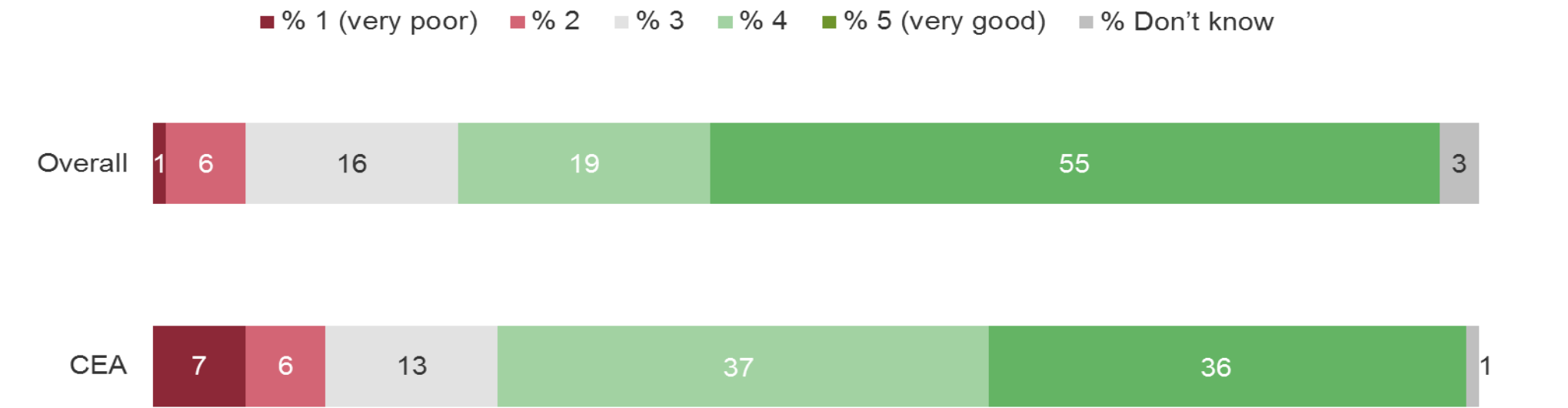
Bases – all who took no action in response to a flood warning. Overall: 90

Views of the service provided by Floodline Warnings Direct were mostly positive.

- The findings are based on all those who had received a FWD warning from any of the possible channels: 55% rated the service as 5 out of 5 and 19% rated it 4 out of 5.
- This similar to the previous year’s findings (46% and 25% respectively).

Percentages for those flooded in the last 12 months can’t be included due to their low base size at this question (21 interviews). Of the 21 interviews, 12 respondents rated the service as 4 or 5 out of 5.

Q32. You said the most recent flood warning you had was first received from the Floodline Warnings Direct service. Thinking about this flood warning, how would you rate the quality of service you received from Floodline Warnings Direct? Please give a score on a scale of 1 to 5 where 1 is very poor and 5 is very good.



Bases – all who received a warning from FWD (from any source). Overall: 164; CEA: 40
Flooded: not shown due to low base size (21).

Key findings: advice from flood victims

49

□ Be prepared is the key bit of advice that flood victims would share with others at risk of flooding.

- This might reflect an earlier finding that half of those flooded in the last 12 months only found out they were at risk once they were first flooded.
- Respondents also highlighted the importance of keeping informed, taking notice of warnings and moving valuables and possessions.

*Take the risk seriously
and follow the
guidelines given by the
Environment agency.*

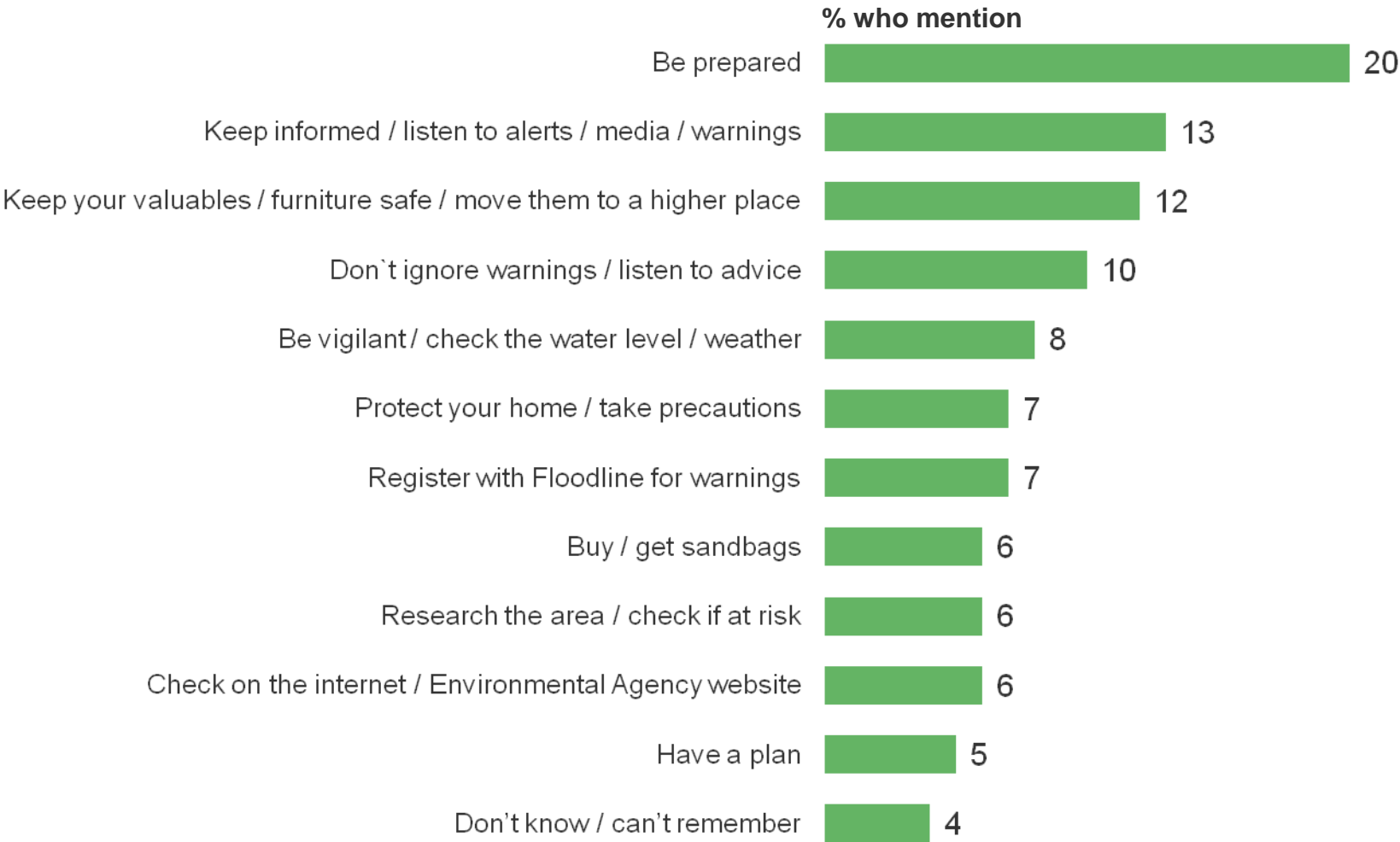
*Do not ignore the
warnings. It's best to
be safe than sorry.*

*Be alert. Check everything
you can and what is going
to happen. Be vigilant and
think ahead.*

*Make preparations well
in advance and be
prepared to use them if
necessary.*

Be prepared is the key bit of advice that flood victims would share with others at risk of flooding.

Q33. What one piece of advice would you give other people at risk of flooding?



- ❑ Respondents in CEAs (46%) were more likely to say they didn't believe flood warnings than respondents Overall (33%).
- ❑ Respondents in CEAs (20%) were less likely to take action to protect their home in response to a flood warning than respondents Overall (43%).
 - This reflects the fact they were less likely to believe flood water would reach their property.
- ❑ Most respondents in CEAs were positive about the FWD service
 - However they were less likely than respondents Overall to rate the service as 5 out of 5 and more likely to rate it as 4 out of 5.

Advice and information sources

- ❑ **The Environment Agency is the organisation that is ‘top of mind’ for most respondents when thinking about flooding.***
 - 58% mentioned the Environment Agency, an increase of 8 percentage points since the previous survey.
 - 24% mentioned local councils and 15% water boards or authorities – both also increases on the previous year’s figures .
 - The number mentioning the Fire Service fell from 17% to 10%.
- ❑ The Environment Agency was less likely to be ‘top of mind’ for certain groups than respondents Overall. These groups included:
 - younger respondents aged 18–34 (44%)
 - those in lower social grades (DE) (43%)
 - those renting their home (43%)
- ❑ Conversely, the Environment Agency was more likely to be ‘top of mind’ for ABs (70%) and owner occupiers (60%).
- ❑ One in five respondents (18%) was unable to mention any organisation they associated with flooding.
 - This finding was higher among young people aged 18–34 (33%) and DEs (27%).
 - This might reflect a lower level of engagement with flooding among these groups.

* Responses to this question are likely to be affected by the fact that respondents are told in the introduction to the survey that the research is for the Environment Agency.

The Environment Agency is the organisation which is ‘top of mind’ when it comes to flood risk.* This perception has increased since the 2012 to 2013 survey, presumably as a result of the floods in winter 2013 to 2014.

Q9. And when you think about flooding, which organisations or associations come to mind?

	% who mention	% change since 2012 to 2013	% CEA	% Flooded
The Environment Agency	58	+8	54	61
Local Authorities	24	+10	28	32
Water Board / Water Authority / Water companies	15	+4	14	20
The Fire Service	10	-7	10	3
The Police	6	+1	3	2
Floodline / Flood alert / Flood watch	4	+1	2	3
Insurance companies	3	n/a	3	1
Community flood groups	2	n/a	2	3
Central Government	2	0	2	3
River Authority / Agency	2	n/a	1	3
Other	2	+1	2	3
Don't know	18	+3	18	13

Bases – all respondents.
Overall: 795; CEA: 254; Flooded: 65

* Responses to this question are likely to be affected by the fact that respondents are told in the introduction to the survey that the research is for the Environment Agency.

□ Around a third of respondents Overall (31%) had received advice or support.*

- Respondents who had taken four or five of the key actions identified by the Environment Agency were more likely to have received support or advice (57%) than respondents Overall (31%).
- This reflects an earlier finding that respondents who have received advice and support in the past 12 months were significantly more likely to have taken all the five key actions than respondents Overall.
- This indicates a strong relationship between preparation levels and the provision of advice and support.
- Respondents aged 55+ were more likely to have received support than respondents Overall (38%).
- Those respondents aged 18–34 were less likely to have received support than respondents Overall (20%).
- Respondents who understood how to protect their home from flooding were more likely to have received support or advice than respondents Overall.

* This question was asked before the section on flood warnings with the intention of seeing if people have received advice or support on flooding generally. However, it is possible that some respondents interpreted the question to be referring to flood warnings in particular.

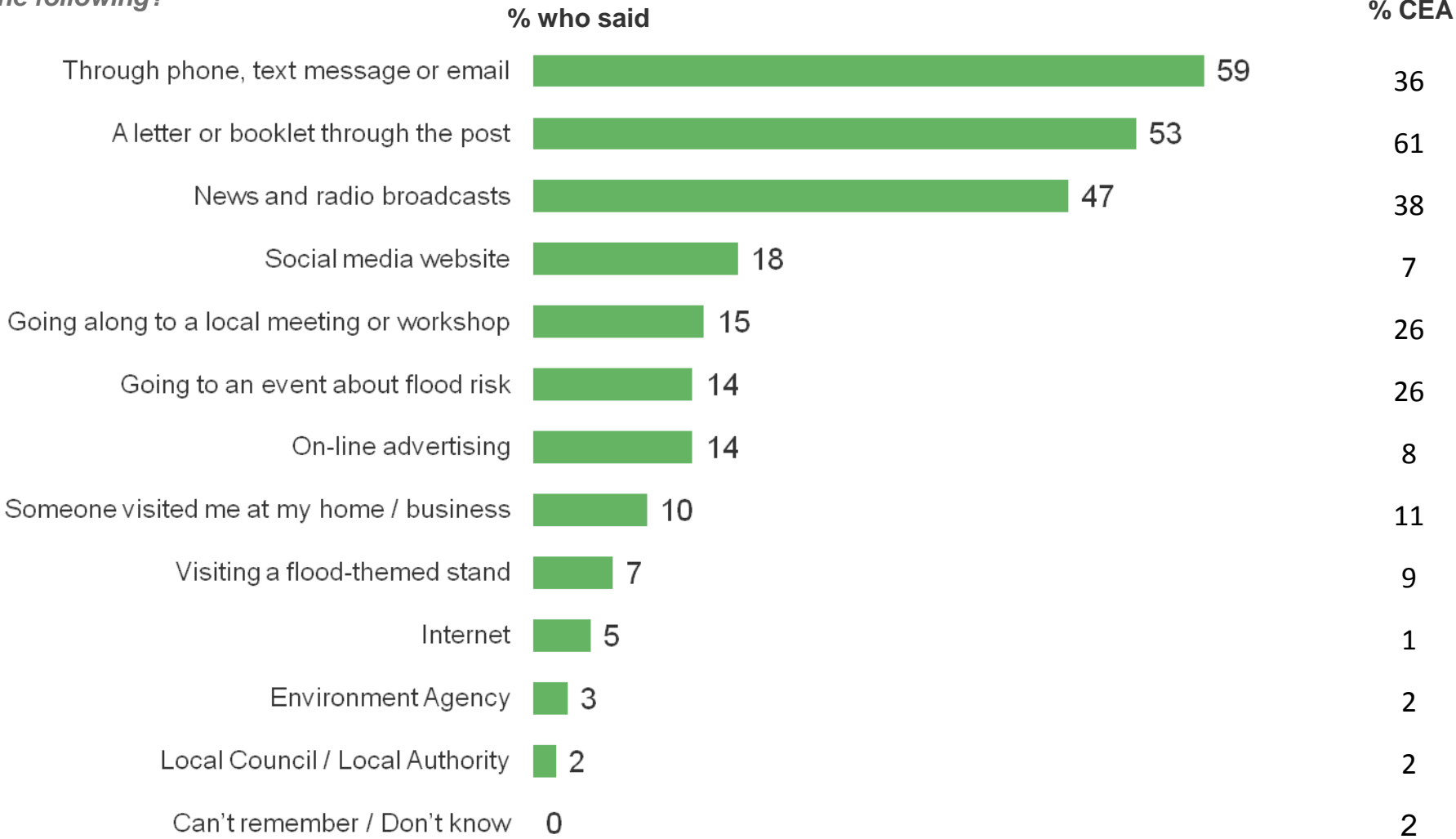
□ Advice on flood risk and preparation were most likely to come via traditional media but social media is also part of the mix.

- The most common ways in which respondents had received advice or support was through:
 - phone/ text message/ email
 - a letter/ booklet through the post
 - news and radio broadcasts
- Broadcast media as a means of receiving advice or support increased from just 21% in the 2012 to 2013 survey to 47% this year, potentially reflecting the coverage of the winter floods.
- Social media was also a fairly common source of advice or support (18%).
- Older respondents and those in lower social grades (DE) were more likely to go to a meeting or event than respondents Overall.
- Older respondents were also more likely to have been visited by someone at their home or business (17% versus 10% respondents Overall) or to have visited a flood themed stand at an event (12% versus 7% respondents Overall)

Advice on flood risk and preparation was most likely to come via traditional media but social media was also part of the mix.

57

Q14. Did you receive this advice or support about flood risk and how best to prepare for a flood from any of the following?



Bases – all who received advice or support. Overall: 253: CEA: 83
Flooded not shown as base is too low (23).

Key findings: advice received and resulting actions

58

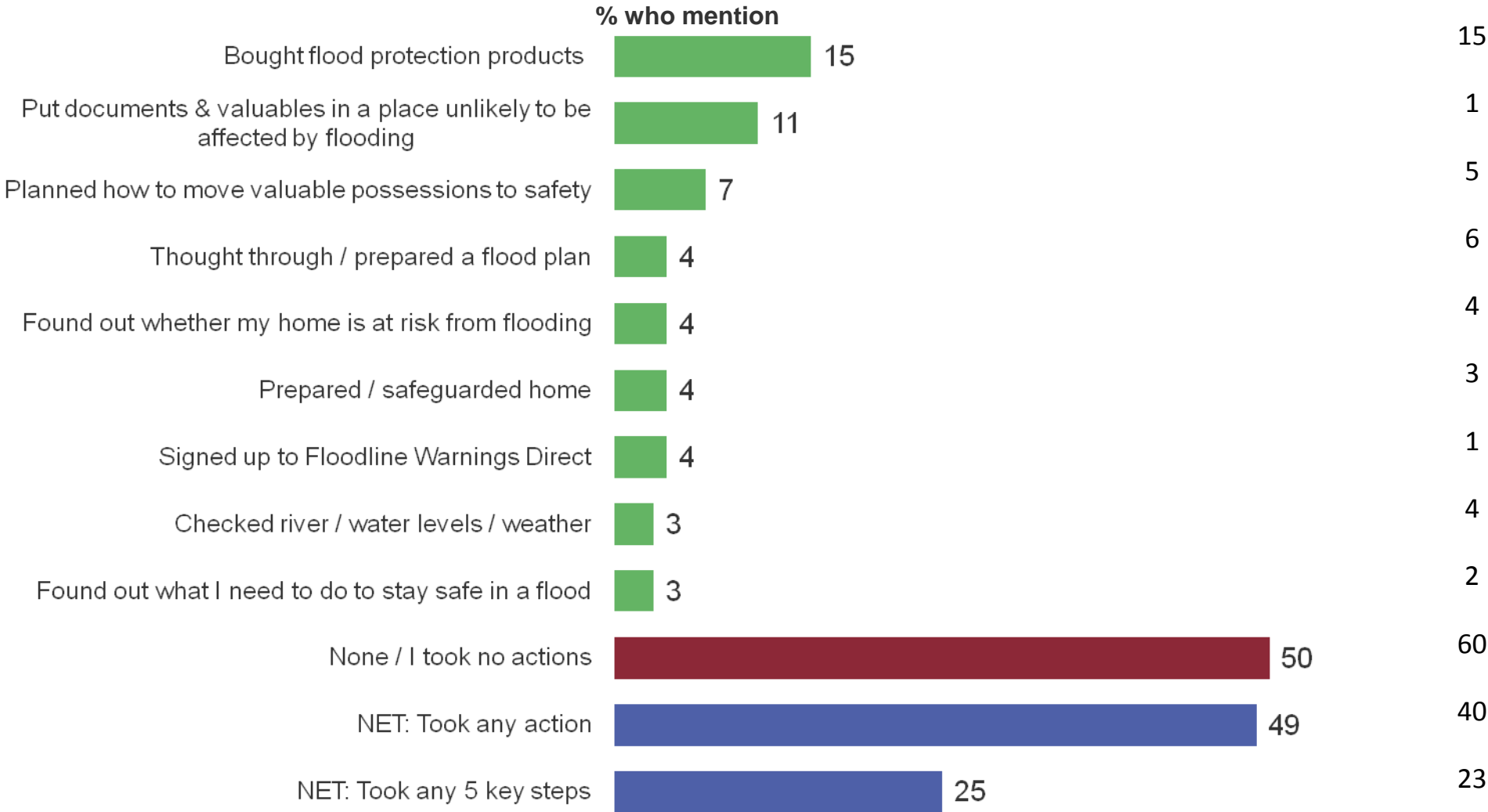
- ❑ **There was an even split between those who did (49%) and didn't (50%) take action as a result of advice received.**
 - Of those who received advice, 25% took one of the five key actions. These were most commonly:
 - buying flood protection products (15%)
 - putting documents and valuables out of harm's way (11%)
 - planning how to do this (7%)
- ❑ **There are some differences in actions taken depending on the source of advice.**
 - Respondents who went to an event or meeting were much more likely to have taken one of the key actions (58% of those who went to an event, 45% of those who went to a meeting).
 - This suggests this type of face-to-face contact is an effective way of encouraging preparation.

Half took any action in response to the advice or support they received. One in four took one of the five key actions identified by the Environment Agency – most noticeably buying flood protection products.

59

Q15. And what actions, if any, did you take as a result of this advice?

% CEA



Bases – all who received advice or support. Overall: 253; CEA: 83
Flooded not shown as base is too low.

□ Most people (70%) would use the internet for more information about flooding and preparation.

- The next most popular source was the local council (18%).
- Those who had been flooded in the last 12 months were slightly less likely to mention the internet (56%), but were more likely to reference the council / government generally and phone the Environment Agency specifically.
- Groups who were more likely to be offline* unsurprisingly used the internet less often than the average, with a greater reliance on looking to their local council. For example, older people (in particular those households with someone aged 75 and over) and the lower social grades DE are relatively more likely to look to the council than respondents Overall.

□ The Environment Agency website is the most popular site for internet users. **

- Twice as many respondents mentioned the Environment Agency website than search engines (58% versus 29%).
- Council or local government websites were mentioned by 13% of respondents compared with just 2% in the previous year's survey.
- Far fewer respondents said they would use search engines than did so in the previous survey (49%), while the percentage saying they would use the Environment Agency website was similar (55%). This suggests the Environment Agency is more synonymous with flooding and that respondents might not go to the effort of looking elsewhere.
- Younger people (18–34) were more likely to use a search engine (56%) but much less likely to use the Environment Agency website (37%), reflecting a lower awareness of the organisation and its role.
- Those in higher social grades AB were more likely to use the Environment Agency website (67%).

* The results of this survey show that 64% of people aged 55+ and 68% in social grades DE use the internet compared with 85% Overall.

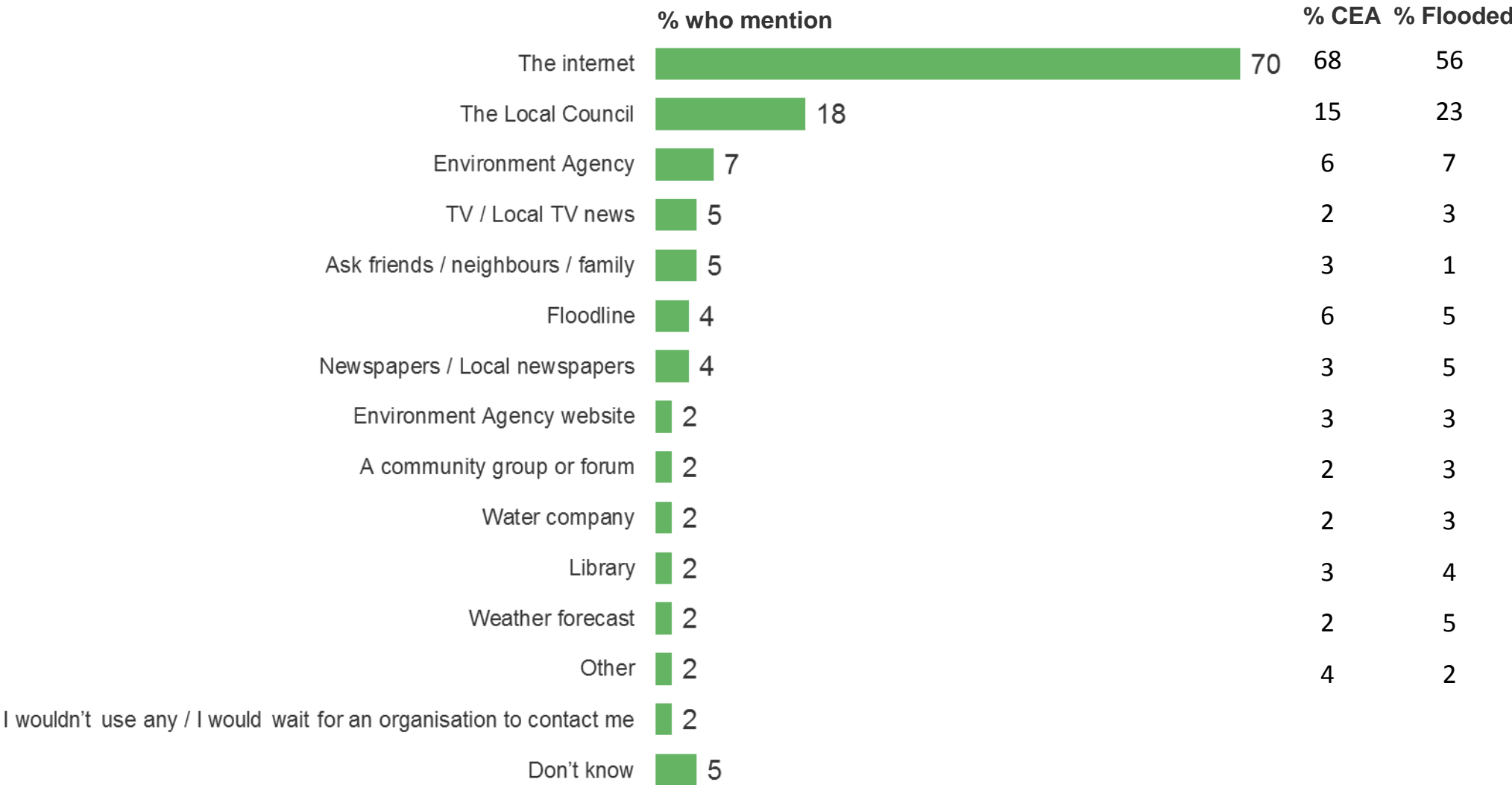
** Once again, this finding might be affected by the reference to the Environment Agency when the survey is introduced.

❑ Not everyone who said they would use the Environment Agency website had done so.

- 40% of internet users had already used the Environment Agency website to look for information on flooding compared with 58% who said they would.
- 12% had looked at flooding information on GOV.UK.

The internet is the most popular source to get information on flooding. However those who had been flooded in the last year were relatively more likely to look to their local council for information.

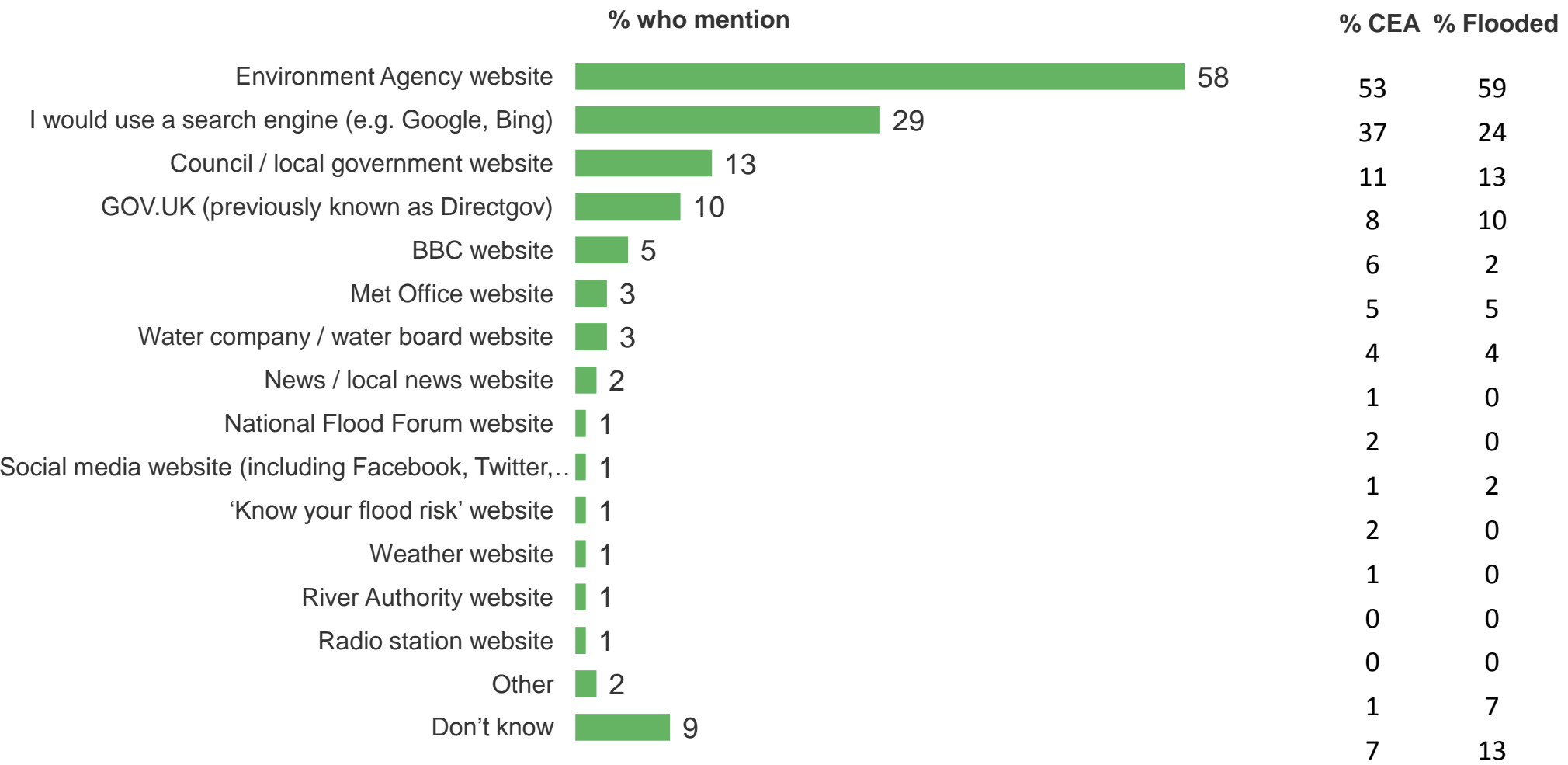
Q16. Where would you look, if you wanted to find out more information about flooding and how best to prepare for it?



Bases – all respondents. Overall: 795; CEA: 254; Flooded: 65

Most internet users would use the Environment Agency website to find out more about flooding and how to prepare for a flood. Three in ten would also use search engines while very few would use social media.

Q17. Thinking specifically about online information you may use to find out more about flooding and how to prepare for a flood, which specific websites would you use?



Bases – all internet users. Overall: 682; CEA: 215; Flooded: 61

□ The flood risk and flooding information on the Environment Agency (or GOV.UK) websites is generally well received.

- Most respondents who viewed the information agreed that:
 - they could trust it (81%)
 - it's easy to understand (79%)
 - it tells them what they need to know and do (76%)
- These metrics are broadly in line with 2012 to 2013, although there was an 8 percentage point increase in agreement with the third of these statements.
- While mostly positive about the website, people who had been flooded in the last 12 months were more likely to have negative perceptions than respondents Overall. They were less likely to trust the flood risk information (58%) and more likely to disagree* with the statement that 'it's easy to understand' (21% versus 9% respondents Overall).

□ Views on the flood maps are also positive.

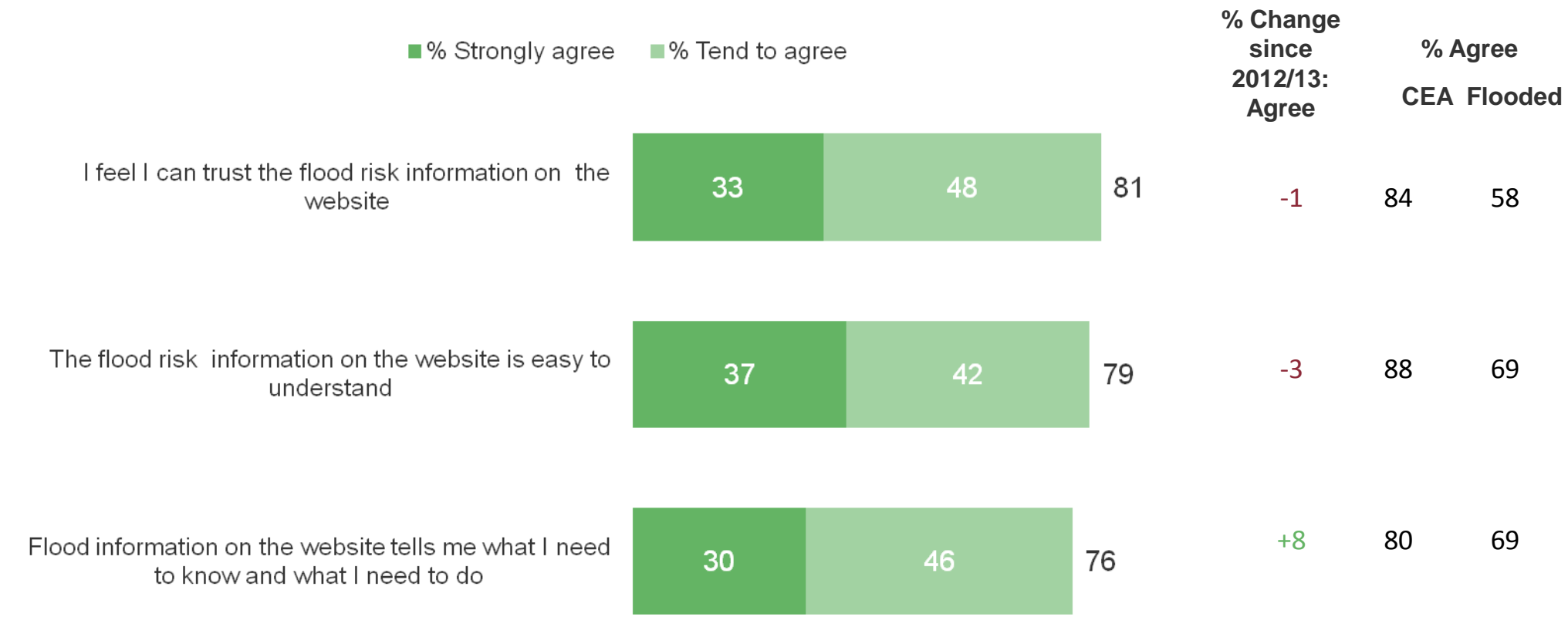
- 45% of internet users had viewed the flood maps
- Of these respondents, 88% agreed they were easy to understand and that they understood what the flood risk information meant for them.
- Those who had been flooded in the last 12 months were less likely to feel the flood maps were easy to understand, although the majority still agreed they were (73%). This difference could be due to different expectations or requirements of the flood maps for this group.

* 'Disagree' figures are not shown on the chart shown on the next two slides.

Most visitors to the Environment Agency (or GOV.UK) websites are positive about the flood risk pages. They feel the information is trustworthy, easily understood and pertinent. Trust is somewhat lower among those who had been flooded in the last year.

65

Q20. How much do you agree or disagree with the following statements about the Environment Agency website or GOV.UK?

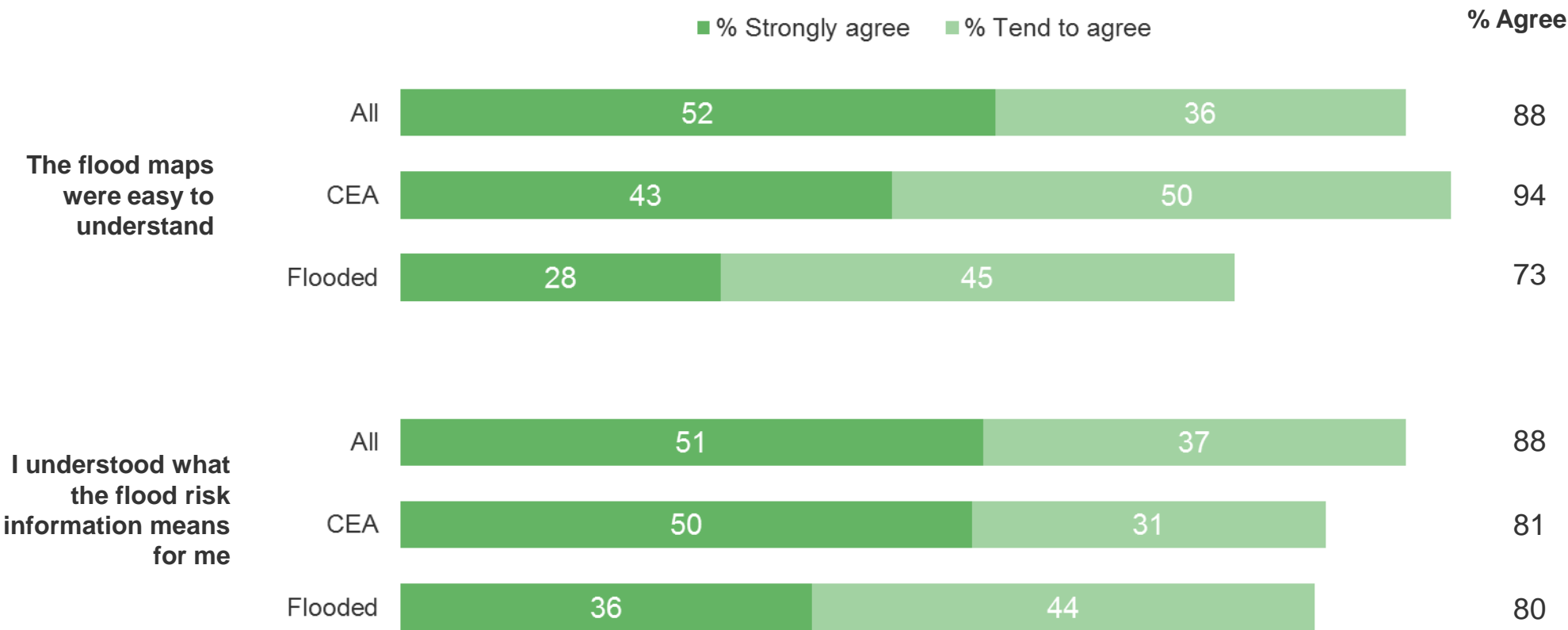


Bases – all who had used the Environment Agency website or GOV.UK. Overall: 292; CEA: 85; Flooded: 33

The flood maps on the Environment Agency website (or GOV.UK) are viewed positively by users. They feel they are easy to understand and that they understand what the information means for them.

66

Q23. You mentioned that you have looked at the flood maps on Environment Agency website or GOV.UK or the directgov website. How much do you agree or disagree with the following statements about the flood maps?



Bases – all who have looked at flood maps. Overall: 302; CEA: 86; Flooded: 34 (small base)

□ 34% of respondents in CEAs had received advice or support.

- This figure is not significantly different to respondents Overall (31%).
- People in CEAs were less likely to have received this advice by phone/ text/ email or news and radio broadcasts.
- They were much more likely to have gone to a meeting or event than respondents Overall, reflecting a wider reach in terms of community engagement activities.
- They are also less likely to have received advice via social media.

Reputation

□ Awareness of the Environment Agency was extremely high and had increased since the previous year.

- 95% of respondents said they had heard of the Environment Agency before taking part in the survey.
- This is an increase of 8 percentage points since the 2012 to 2013 survey.
- Younger people (18–34 year olds) were less likely (86%) to have heard of the Environment Agency than respondents Overall.

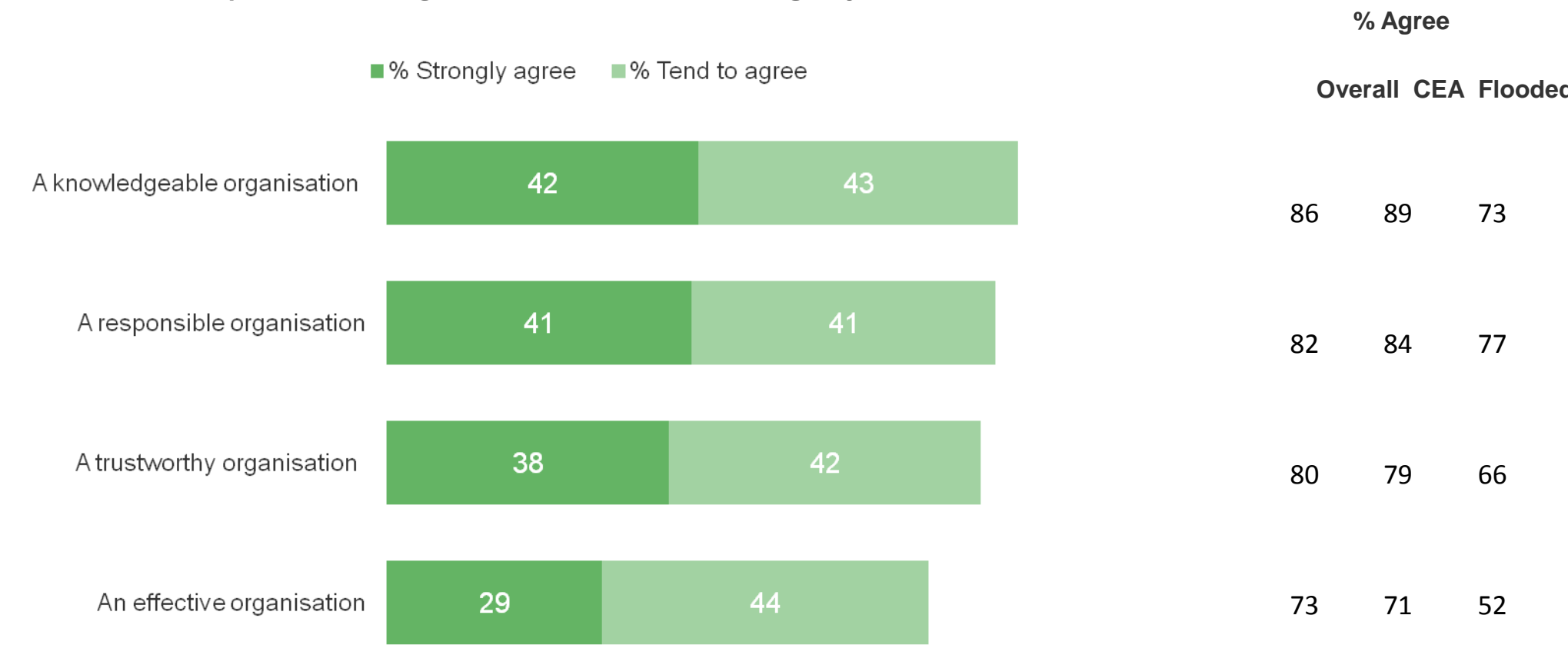
□ Those who had heard of the Environment Agency were broadly positive about it.

- A large majority agreed that the Environment Agency is knowledgeable (86%), responsible (82%), trustworthy (80%) and effective (73%).
- People who had been flooded in the last 12 months were:
 - less positive about the Environment Agency than respondents Overall, though they remained mostly so
 - less likely to agree that the Environment Agency is trustworthy
 - far less likely to view the Environment Agency as an effective organisation
- Exposure to the Floodline Warnings Direct service has a positive impact on perceptions of the Environment Agency.
 - Respondents who had received a flood warning via Floodline Warnings Direct were more likely than respondents Overall to feel the Environment Agency was trustworthy (86% versus 80%) and effective (80% versus 73%).

Awareness of the Environment Agency was extremely high and had increased since the previous year. Those who had heard of the Environment Agency were broadly positive about it. However people who had been flooded were less so.

70

Q35. *To what extent do you agree or disagree with each of the following statements about The Environment Agency as a whole and how it operates as an organisation? The Environment Agency is...*



Bases – all who have heard of the Environment Agency. Overall: 755; CEA: 237; Flooded: 64

There are no clear patterns in demographic differences in terms of perceptions of the Environment Agency and its reputation.

Q35. *To what extent do you agree or disagree with each of the following statements about The Environment Agency as a whole and how it operates as an organisation? The Environment Agency is:*

% agree: Bases: All who have heard of the Environment Agency, shown in brackets	Overall (755)	Actual flood risk level			Age			Social grade			
		High (281)	Medium (263)	Low (251)	18-34 (60)	35-54 (440)	55+ (255)	AB (266)	C1 (113)	C2 (158)	DE (149)
A knowledgeable organisation	86	85	85	87	84	85	87	87	93	82	82
A responsible organisation	82	80	79	90	81	82	84	85	87	79	79
A trustworthy organisation	80	78	77	85	80	80	78	83	83	78	74
An effective organisation	73	73	68	78	71	73	73	73	75	69	71



Significantly lower than Overall



Significantly higher than Overall

Appendix



□ There are a number of differences across important questions in the survey in terms of age.

- Age did not affect the extent to which people feel at risk, but life stage did. Respondents with children (under 18) were more likely to feel at risk than those without (51% versus 39%).
- 18–34 year olds were less likely than respondents Overall to have registered for flood warnings or joined a community group.
- 18–34 year olds were also less likely than respondents Overall to know how to respond to a flood warning, while older people (55+) were more so.
- 18–34 year olds were more likely than respondents Overall to agree there was a link between flooding and climate change.
- Those aged 55+ were more likely than respondents Overall to agree they would flood in the next five years.
- Those aged 55+, and in particular those households with someone aged 75 and over, were more likely than respondents Overall to look to the council for information and less likely to look online.
- 18–34 year olds were more likely to use a search engine than respondents Overall and less likely to use the Environment Agency website. This reflects a lower awareness of the organisation and its role among younger people.

□ There are a few demographic across important questions in the survey in terms of tenure.

- The relatively low base size for renters means that any differences are not always statistically significant, although the differences listed below.
- Renters were less likely than owner occupiers to have taken any of the five key actions (58% compared with 72%).
- Renters were more likely than owner occupiers to link flooding to climate change (82% compared with 67%).
- Renters were more likely than owner occupiers to say they would watch TV (10% compared with 4%) or go to a library (7% compared with 1%) to find out information about how to prepare for flooding. This partly reflects the fact they are less likely to be online (77% compared with 86%).

□ There are a number of differences across important questions in the survey in terms of social grade.

- Higher social grades (ABs) were more likely than respondents Overall to consider themselves at risk, while those in social grade C2 were less likely.
- Lower social grades (C2 and DEs) were less likely than respondents Overall to have taken any of the five key actions.
- Higher social grades (ABs) were more likely than respondents Overall to have found out if they are at risk, while lower social grades (DEs) were less likely to have registered for Floodline Warnings Direct.
- Higher social grades (ABs) were more likely than respondents Overall to feel their area is at risk.
- Lower social grades (DEs) were more likely to look to the council for advice and support than respondents Overall.
- Higher social grades (ABs) who are online were more likely than respondents Overall to use the Environment Agency website to find out more about flooding.

- ❑ The following tables show data for the most important questions by the six former Environment Agency Regions.
- ❑ The tables are based on findings from the 501 interviews conducted with the 'at risk' non-CEA respondents. They do not include the findings from the CEA interviews, which were predominantly from the Midlands Region, and would impede comparisons with other regions if included.
- ❑ This also means the findings in the 'All' column do not match with the findings for the Overall group in the report.

Q7. You have told us that your property has previously been flooded, before this happened did you believe your property was:

Q8. Do you believe your property is at risk of flooding? Do you believe it is... ?

% agree: Bases: All respondents, shown in brackets	All (501)	Anglian (81)	Yorkshire and North East (89)	North West (80)	South East (95)	South West (81)	Midlands (75)
Definitely at risk	5	6	3	2	5	6	9
Possibly at risk	39	35	37	43	45	36	34
Not at all at risk	54	58	56	54	50	53	53
Don't know	2	0	3	0	1	4	4
NET: At risk	44	42	40	46	49	43	43



Significantly lower than All



Significantly higher than All

Q9. And when you think about flooding, which organisations or associations come to mind?

% agree: Bases: All respondents, shown in brackets	All (501)	Anglian (81)	Yorkshire and North East (89)	North West (80)	South East (95)	South West (81)	Midlands (75)
Environment Agency	58	52	59	54	61	59	61
Local authorities	23	27	28	13	24	28	17
Water board / water authority / water companies	15	16	15	13	16	14	14
Fire Service	11	13	13	9	6	7	16
Police	6	7	5	6	6	6	4
Floodline / Flood alert / Flood watch	4	4	5	2	5	7	1
Insurance companies	3	4	3	2	5	1	2



Significantly lower than All



Significantly higher than All

Respondents in Midlands Region were more likely than all respondents to have found out if they are at risk of flooding. Respondents in Yorkshire and North East were less likely than all respondents to have bought flood protection products.

Q21. Here are a number of things people could do to prepare in case their home might be flooded. For each I would like you to indicate whether this is something you:

% agree: Bases: All respondents, shown in brackets	All (501)	Anglian (81)	Yorkshire and North East (89)	North West (80)	South East (95)	South West (81)	Midlands (75)
Found out whether my home is at risk from flooding	57	62	56	48	52	53	69
Signed up for Floodline Warnings Direct	37	46	39	28	40	32	39
Thought through / prepared a flood plan	34	42	32	34	30	28	38
Bought any flood protection products	22	15	11	24	29	25	26
Joined a community group	9	5	6	8	12	10	11
Taken at least one key action	70	76	72	60	64	66	79



Significantly lower than All



Significantly higher than All

There are few differences in attitudes to flooding between regions. Those in Midlands Region are more likely than all respondents to feel they have a good understanding of how to protect their home.

Q10/11 . To what extent do you agree or disagree with the following statements?

% agree: Bases: All respondents, shown in brackets	All (501)	Anglian (81)	Yorkshire & North East (89)	North West (80)	South East (95)	South West (81)	Midlands (75)
The people in my community will help one another if it floods	87	90	87	84	86	94	83
I have a good understanding of how to protect my home from flooding	71	74	72	61	63	71	83
I know what I need to do if there was a flood warning issued	68	72	67	58	67	67	77
Preparing my home for future flooding would be worthwhile	61	53	59	65	66	58	63
Protecting my home from a flood is my responsibility	60	65	53	62	56	57	65



Significantly lower than All



Significantly higher than All

There are few differences in attitudes to flooding between regions. Respondents in Anglian Region were more likely than all respondents to feel confident about local flood defences.

Q10/11 . To what extent do you agree or disagree with the following statements?

% agree: Bases: All respondents, shown in brackets	All (501)	Anglian (81)	Yorkshire and North East (89)	North West (80)	South East (95)	South West (81)	Midlands (75)
Flooding is linked to changes in the climate	69	62	72	67	75	63	72
I have confidence in local flood defence systems	58	72	50	47	67	59	54
I believe the area in which I live is at risk of flooding	55	51	50	53	59	58	62
The government is investing enough on flood risk management in my local area	35	36	39	29	42	33	30
My own home is likely to be flooded within the next five years (Base: all who believe their property is at risk of flooding, shown below each figure)	30 (222)	20 (34)	33 (36)	30 (37)	31 (46)	37 (35)	32 (34)



Significantly lower than All



Significantly higher than All

Respondents in South East Region were more positive about the Environment Agency than all respondents, while those in South West Region were more negative.

Q35. To what extent do you agree or disagree with each of the following statements about The Environment Agency as a whole and how it operates as an organisation? The Environment Agency is....

% agree: Bases: All who have heard of the Environment Agency, shown in brackets	All (478)	Anglian (79)	Yorkshire and North East (86)	North West (73)	South East (89)	South West (78)	Midlands (73)
A knowledgeable organisation	86	91	84	82	92	76	93
A responsible organisation	82	88	81	74	93	76	82
A trustworthy organisation	80	84	82	71	90	68	86
An effective organisation	73	80	75	70	80	58	74



Significantly lower than All



Significantly higher than All

Quota targets and achieved sample

- ❑ The original quota breakdown and achieved sample were as shown below.
- The age quota for 18–34 and 35–54 year olds was merged as it was not possible to reach sufficient 18–34 year olds in the sample to meet this quota.
 - The numbers in red denote where the achieved sample was lower than the target sample. For example, there was a target of 31 respondents in medium risk areas in the Midlands, but only a sample of 23 was achieved.

	England (at risk non-CEA sample)						England (Flooded sample)	CEAs
	Anglian*	Yorkshire and North East	North West	South East	South West	Midlands		
Total	81 out of 83	89 out of 83	80 out of 84	95 out of 84	81 out of 83	75 out of 83	40 out of 100	254 out of 250
Risk level								
High	30 out of 31	33 out of 31	29 out of 31	35 out of 32	31 out of 31	30 out of 31	N/A	N/A
Medium	30 out of 31	36 out of 31	33 out of 32	34 out of 31	30 out of 31	23 out of 31		
Low/ very low	21 out of 21	20 out of 21	18 out of 21	26 out of 21	20 out of 21	22 out of 21		
Age								
18–34	47 out of 174 across all regions						N/A	24 out of 83
35–54	299 out of 171 across all regions							147 out of 84
55+	155 out of 155 across all regions							83 out of 83
Gender								
Male	246 out of 248 across all regions						N/A	119 out of 125
Female	255 out of 252 across all regions							135 out of 125
Working status								
Working full time	233 out of 217 across all regions						N/A	131 out of 100
Not working full time	268 out of 283 across all regions							123 out of 150

* The regions are based on the previous Environment Agency regional boundaries.

- ❑ The table on the previous slide shows both the quotas and the actual achieved number of interviews for each sample.
- ❑ The quotas reflect the known population profiles. Therefore the data were weighted to match the quotas and thus ensure that the final data also matched the population.
- ❑ Two weighting schemes were used – one to ensure the weighted CEA sample matched the CEA profile, and one for the non-CEA sample.
- ❑ The flooded sample was not weighted as its population characteristics were not known
- ❑ Groups from the CEA, Flooded and ‘At risk’ non-CEA databases after duplicates had been removed were weighted in proportion to the number of households they represented across the entire ‘at risk’ population for England. This was used to produce the ‘Overall at risk’ figure used throughout the report.
- ❑ The Overall sample group is broadly representative of the ‘at risk’ population in England.

Sample group	Number of interviews	Weighted % of at risk population
CEA	254	8%
Flooded	40*	<1%
‘At risk’ non-CEA	501	91%
Overall	795	100%

* These 40 interviews were achieved using the sample previously identified as having been flooded in the previous 12 months. During the report, references to those flooded in the last 12 months include respondents from the England (at risk non-CEA) sample who had also been flooded in the last 12 months. This increases the number of respondents in this category, making statistical testing (that is, comparison of those flooded in the last 12 months with Overall) more robust.