

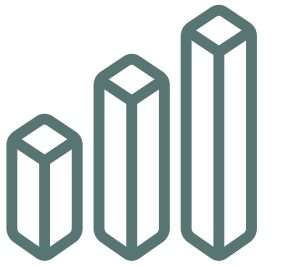


# Flooding and Surface Water Management in Fylde.

Analysis of Survey Data.

March 2021.

「PI」



# Contents.

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# Summary.

# Headlines.

## Numbers



327

Survey responses



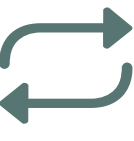
244

Respondents who have experienced flooding to their home premises



49

Respondents who have experienced flooding to their business premises



40%

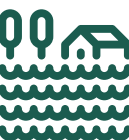
Of residents (and 35% of businesses) referred to repeated flooding incidents in their comments

## Context



77%

Of those who experienced flooding to their home premises, reporting that it occurred in their garden



79%

Of those who experienced flooding to their business premises, reporting that it occurred on their land



August and October

The months where most flooding incidents were reported to have occurred



64%

Of those who experienced flooding to their home, reporting that they experienced some form of emotional distress

## Reasons and Action



43%

Of those who experienced flooding to their home premises giving drains or gulleys not coping as the reason



46%

Of those who experienced flooding to their home premises reporting it to the relevant agencies



27%

Of those businesses that experienced flooding, identifying that it came from neighbouring land or waterways



25%

Of those businesses that experienced flooding, indicating that they conduct their own checks and maintenance

# Background.

## Background and methodology

Fylde Borough Council consulted with residents through an open-access survey to understand the extent and impact of flooding on both residents and business owners in the area.

The aim of the survey was to provide some insight and intelligence to inform a major review of flooding and surface water management by councillors. This review focuses on understanding if existing arrangements are sufficient to deal with the impacts of flooding now and in the future.

The online survey was designed and hosted by Fylde Borough Council, running from late January to early March 2021. In total, there were 318 complete responses to the survey from residents and businesses. 9 additional paper responses have also been included where questions aligned, resulting in an overall response total of 327.

Due to the nature of open-access online surveys, any percentages reported should not be considered as representative of all residents or businesses in the borough. There is likely to be non-response bias in the sample, for example those affected by flooding may be more likely to respond to a survey about flooding.

## Understanding this report


Analysis has been undertaken based on the data available from the survey. There are some limitations in terms of the questions asked or not included. For example, the survey did not identify if the respondent owns a business. However, a range of additional analysis on the survey data has been possible:

- Open-ended comment questions have been coded to identify key themes and example comments and case studies have been used to explore these further.
- Any dates or time periods provided by respondents have been standardised and grouped where possible to understand when flooding instances were most likely to have taken place.
- Where address or postcode data was provided, instances have been mapped to highlight where flooding was most likely to have occurred.

# Flooding to home premises.


# Overview of flooding to home premises.

## Extent to which flooding has occurred in or on home premises in Fylde

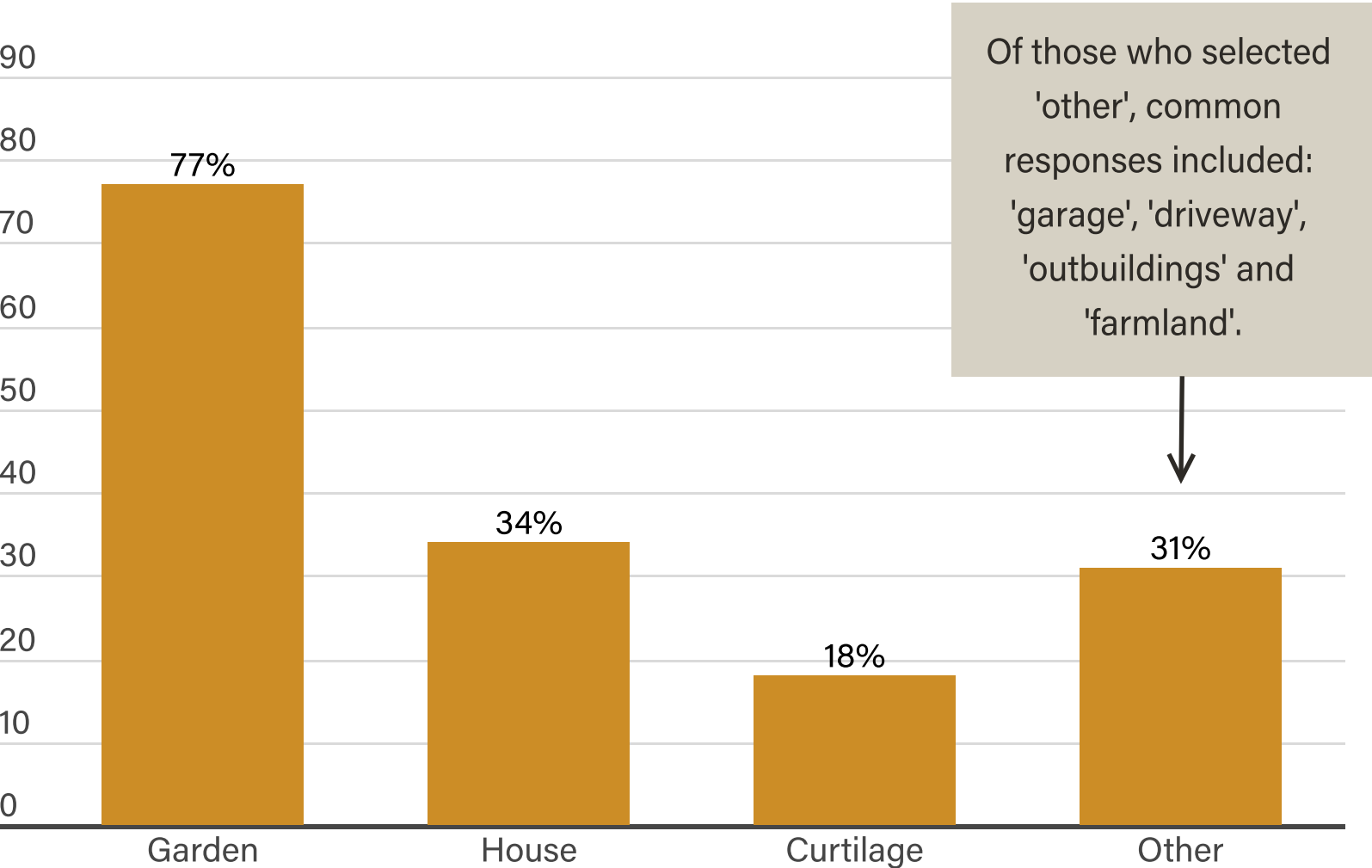
 **244**  
Residents who responded to the survey experienced flooding to their home premises




This equates to 75% of all survey respondents having experienced flooding to their home premises. This proportion is likely to be over-representative due to non-response bias, i.e. respondents are more likely to complete a flooding-related survey if they have experienced some form of flooding.

 Has flooding occurred in/on your home premises in the borough of Fylde? (n=327)

## Specific area of home premises where flooding occurred

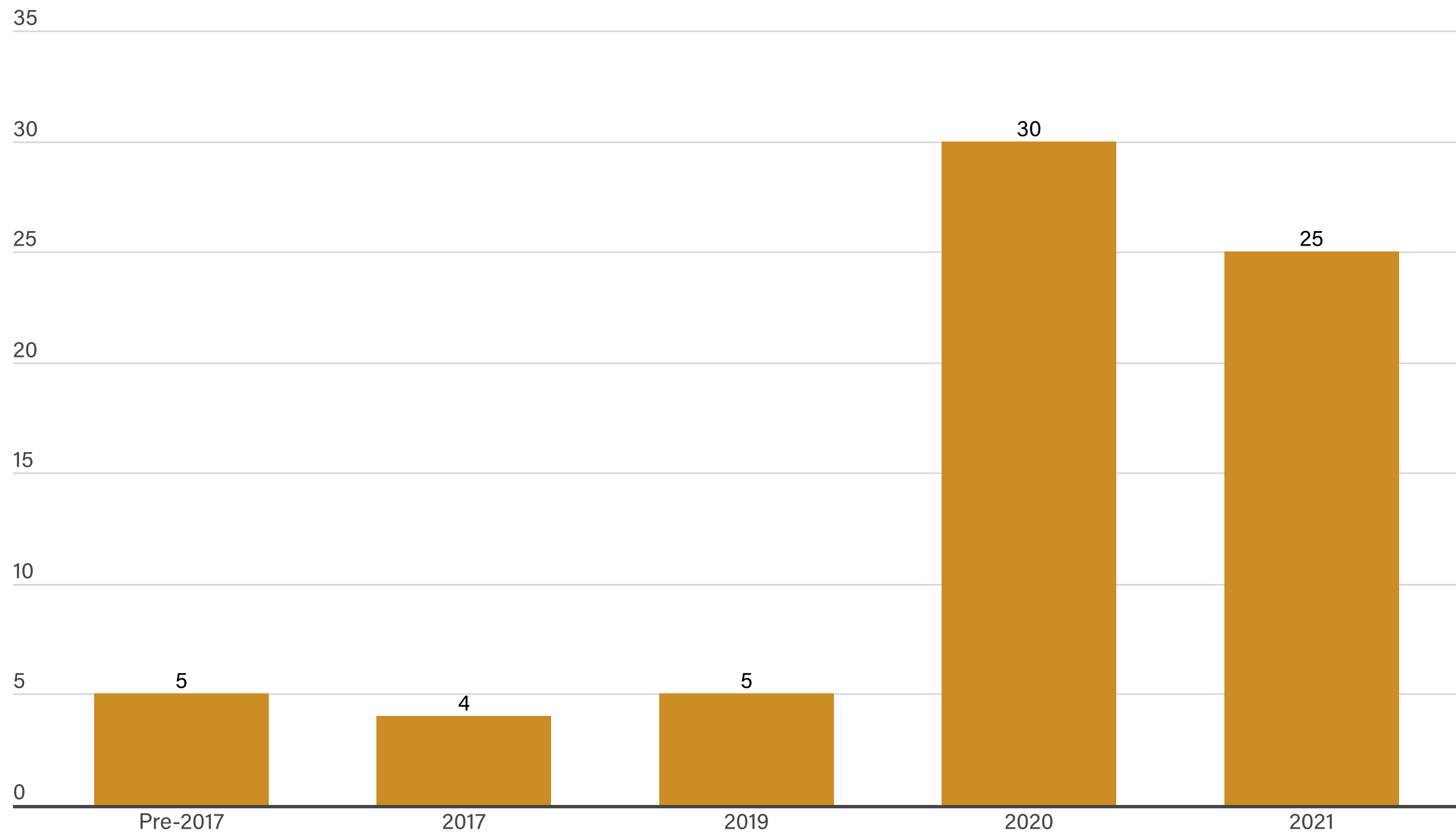


The majority of respondents who experienced flooding to their home premises (77%) reported it having occurred to their gardens.

 If yes to question 1, where exactly did this take place? (n=244)

# Flooding incidents to home premises per year.

Count of how many individual dates of flooding were noted per referenced year



52% of those who had experienced flooding at their home premises specified a date (or dates) for when this occurred.

The chart opposite shows the number of individual dates in each year where flooding was noted by respondents (NB. It is not a count of the number of people who selected each date).

In the pre-2017 category, some of the dates listed relate back to flooding from the 1990s.

Around a quarter of those who did answer the question made reference to repeated flooding incidents with such answers including "almost every year for the last 13", "every time it rains" and "no single instance".

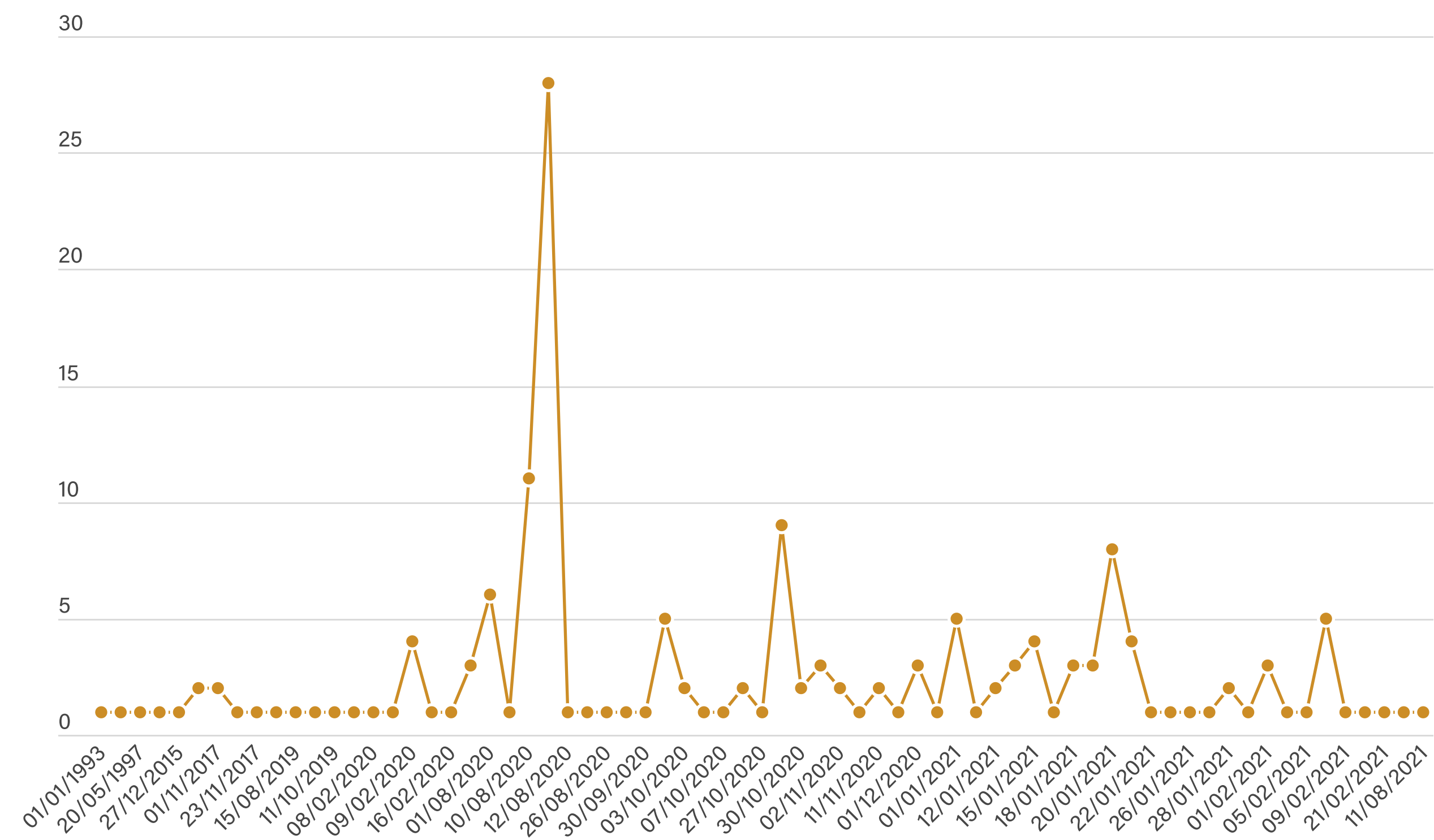


What date(s) was this happen? (please input date format of DD/MM/YYYY) (n=126)



# Timeline of flooding to home premises.

Count of specific dates where flooding occurred to home premises



The majority of respondents made reference to flooding incidents in August 2020 with the highest number of separate individuals (28) selecting the 11th August as a date on which flooding had occurred.

October 2020 also had repeated noted incidents of flooding with 29th October a peak date noted by respondents in this month.

In 2021 with 20th January and 6th February were peak dates of flooding reported by respondents.



What date(s) was this happen? (please input date format of DD/MM/YYYY) (n=126)

# Case studies of flooding incidents to home premises.



## Case Study 1 - repeated flooding incidents



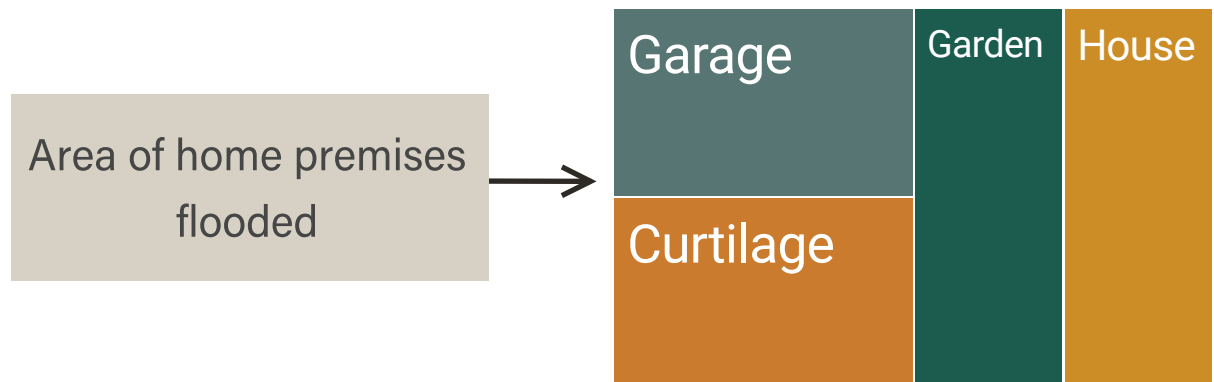
Aware of flood hub website

”

"The most recent major event was the night of 10th and 11th August 2020. There was a thunderstorm which started just before midnight and by 1am water was pouring down my driveway from the street. From about 2.30 am onwards the flood was entering the house through the front and rear doors and also from under the floors. At dawn water was still flowing from the road. The flow started to ease during the morning and eventually stopped at about 9am."

### Believed cause:

- Heavy rainfall
- Inability of combined sewer to cope
- Blocked road gulley



## Case Study 2 - isolated flooding incident

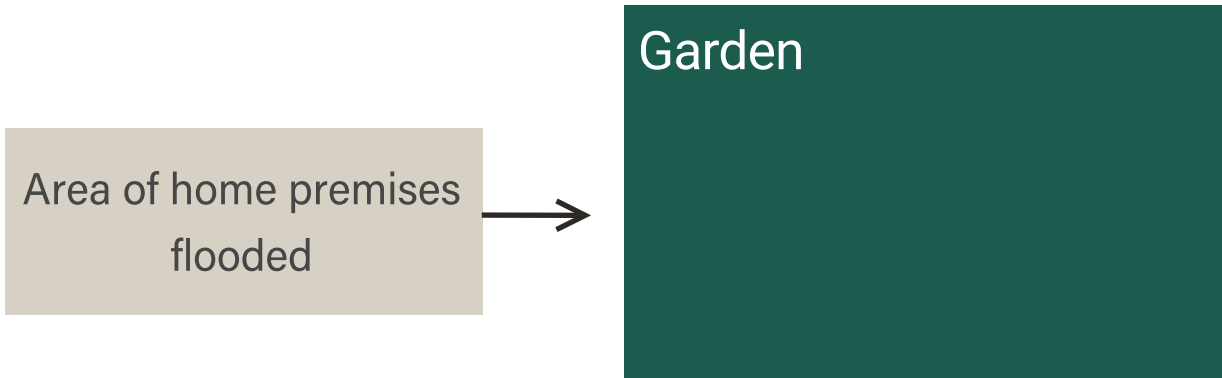


Not aware of flood hub website

”

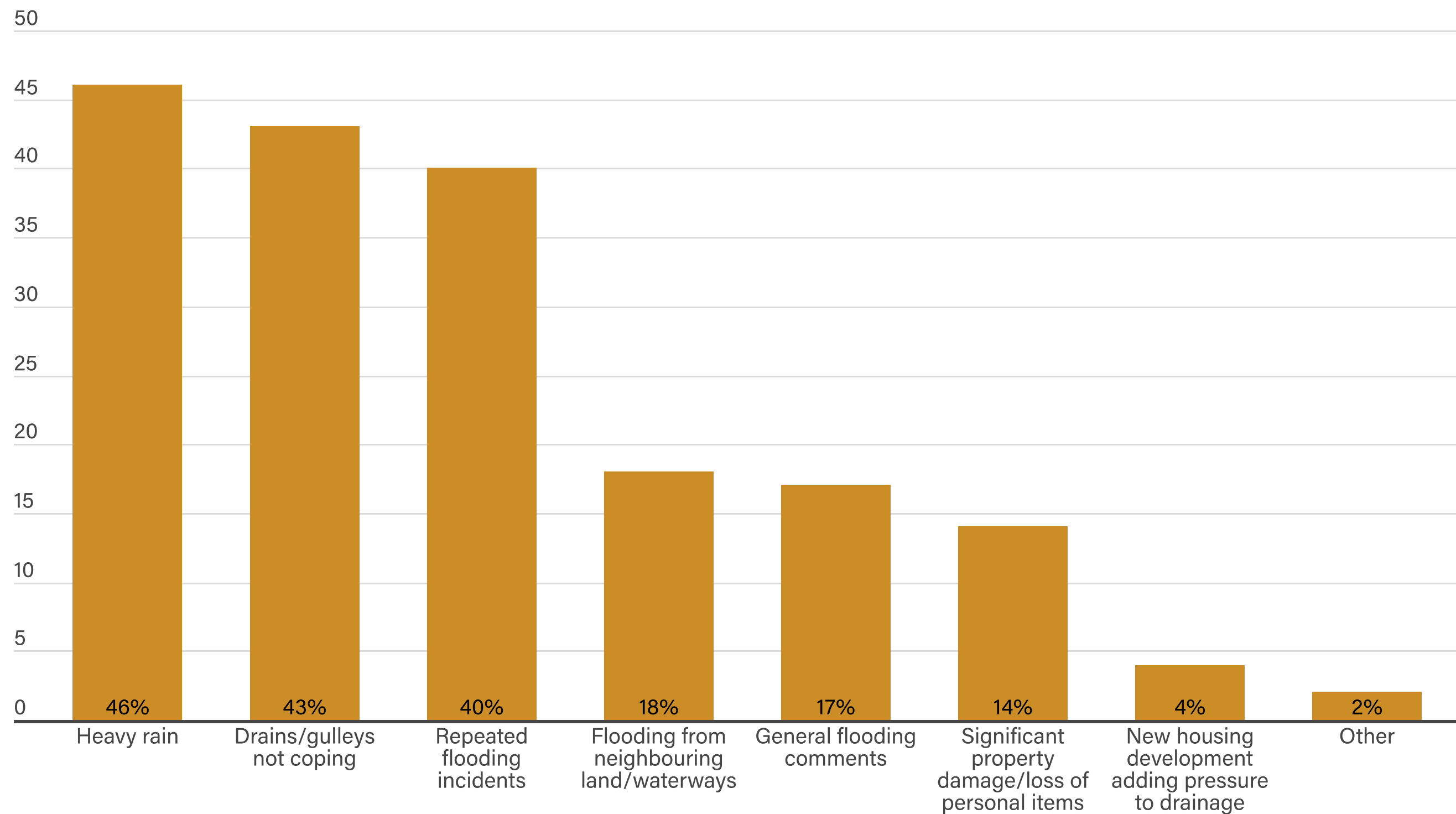
### Believed cause:

- Blocked road gulley
- Heavy rainfall
- Displacement of water from nearby development



# Coded descriptions of flooding event(s) to home premises.

Respondents' description of what happened during flooding event (coded)




Respondents were asked to describe what had occurred during the flooding. These comments were then coded according to common themes.

The majority of respondents made reference to the cause of the flooding with 46% referring to heavy rain and 43% referring to drains/gulleys not coping.

18% also noted water from neighbouring land/waterways and 4% raised concerns about the addition of new housing developments.

40% of responses also highlighted that the flooding was not a one-off incident.

 Please describe what occurred? (n=240)

# Overview of flooding descriptions to home premises.

”

We woke to find our house, garden and garage under 12" of water - 16 houses were flooded in our street

”

Flooding occurs at rear of property in garden and garage EVERY TIME WE GET HEAVY OR PROLONGED RAIN!

”

During torrential rain it appeared the drains could not cope and the road flooded

”

This isn't a one day event, unfortunately anything more than an hour or two rainfall and the main road is flooded and sewage over spills and runs down Hudson Drive.

The smell in the bathrooms at home is also increased at times of heavy rainfall and I believe this is also due to the backing up of drains. Not acceptable in brand new modern housing.

”

Drains couldn't handle the volume of rain water so it couldn't drain away, water came into the property and the complete downstairs had to be redecorated carpeted and new kitchen cabinets and floor - lost a lot of personal items and garage items destroyed.

”

Not sure on the date but since the houses have been built next door the back garden at that side gets waterlogged. It's not yet reached the house but it didn't used to happen before they built the ground up on the other side of the fence

”

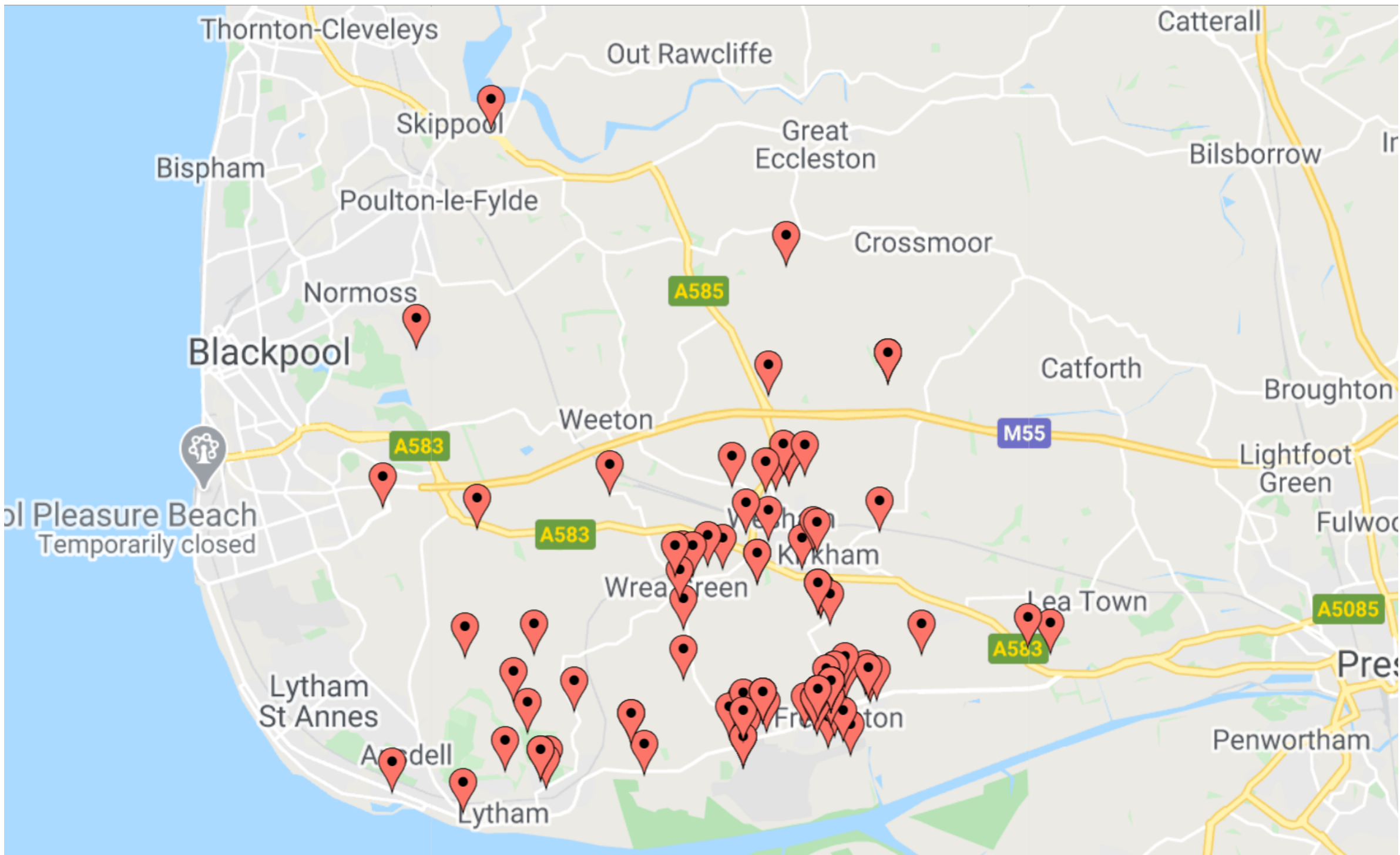
My garden constantly floods when it rains now, and has only done so for the past 18 months. Prior to this, it never did. Something has changed and it's not my doing!



Please describe what occurred? (n=240)

# Map of flooding event(s) to home premises.


Areas where respondents noted flooding had occurred.



Of those who had experienced flooding to their home premises, 119 provided a postcode.

These postcodes have then been plotted onto the opposite map using an online tool.

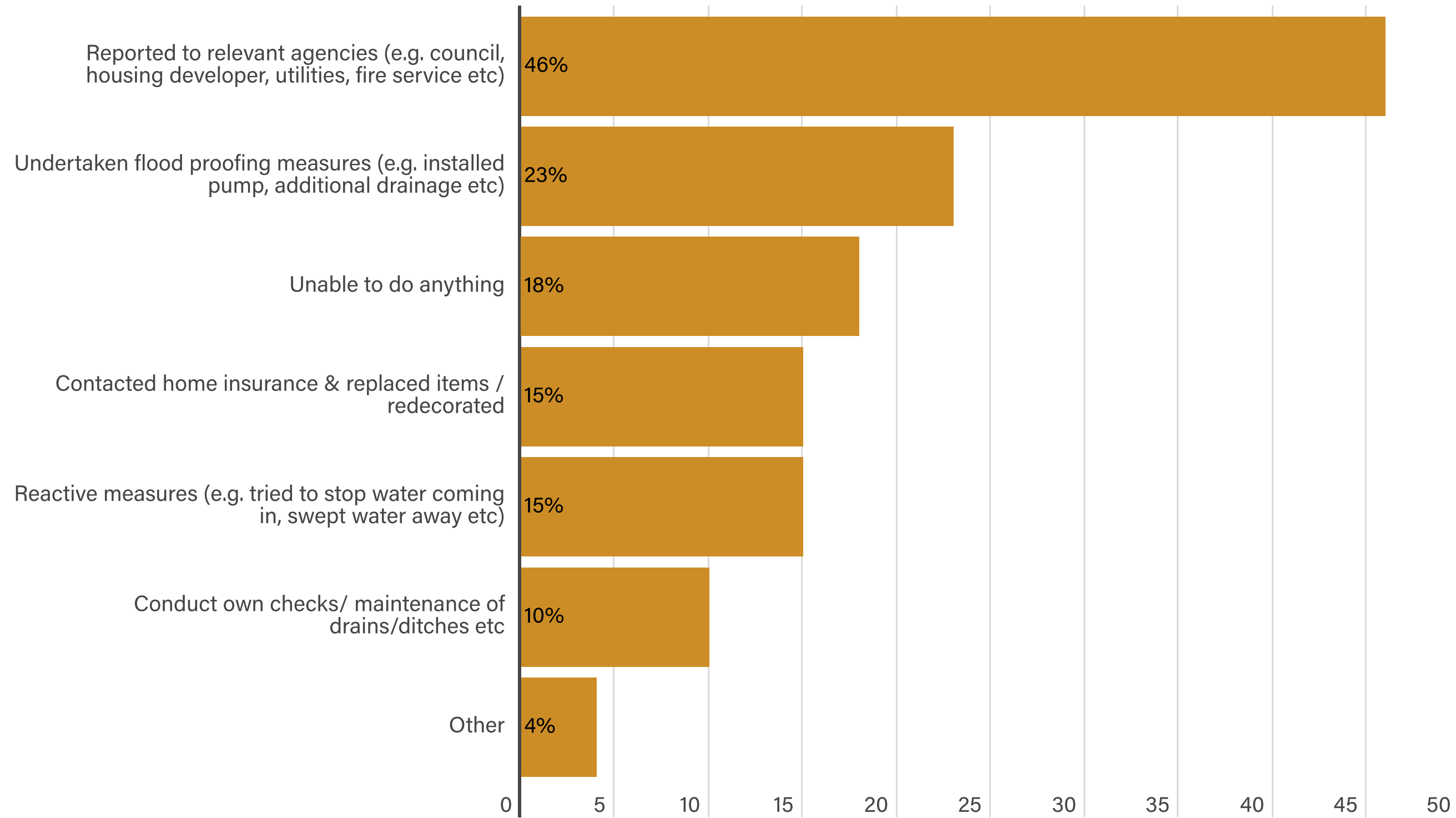
Looking at the map, it can be seen that whilst flooding incidents have occurred over a relatively wide ranging area, there nonetheless does appear to have been particular pockets of concentration in the Freckleton, Kirkham, Wesham and Wrea Green areas.

 Map generated through BatchGeo on 12 March 2021



# Coded descriptions of residents' course of action to flood.

Course of action taken by respondents experiencing flooding to their home premises before, during & afterwards



Respondents were asked to describe what course of action they had taken in relation to the flood - before, during and afterwards. These comments were then coded according to common themes.

Just under half (46%) of respondents referred to reporting either the flood itself to relevant agencies or concerns prior to the flood (e.g. blocked drains or plans for new developments).

Almost a quarter have undertaken some form of flood proofing measures ranging from purchasing sandbags, installing drains/pumps to re-designing areas of their property.



What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=226)

# Overview of residents' course of action.

”

Never been flooded in 40 years and it did flood once on the 11 August and nearly a second time few months after - we are still dealing with the house work

”

Kept an eye on it and moved photos and computer etc. Checked that own drains were clear

”

Redesigned garden. Put in soak away. Bought water pump. Raised decking.

”

We had no warning so was unable to do anything prior, during the flood we just had to wait for the water to subside, after the flood we had to have the house dried and sanitised, extensive building work and replace all floors furniture and lost belongings etc.

”

We had no idea the drains were blocked and therefore could not have predicted that we needed to do anything prior to it happening. My property has been here for a very long time and this has never happened before. During the flood we were already underwater when we were alerted, and following all we could do was dispose of our belongings that were destroyed.

”

Contacted services (police) during the night. Contacted insurance company. Tried to salvage belongings. Contacted local councillor.

”

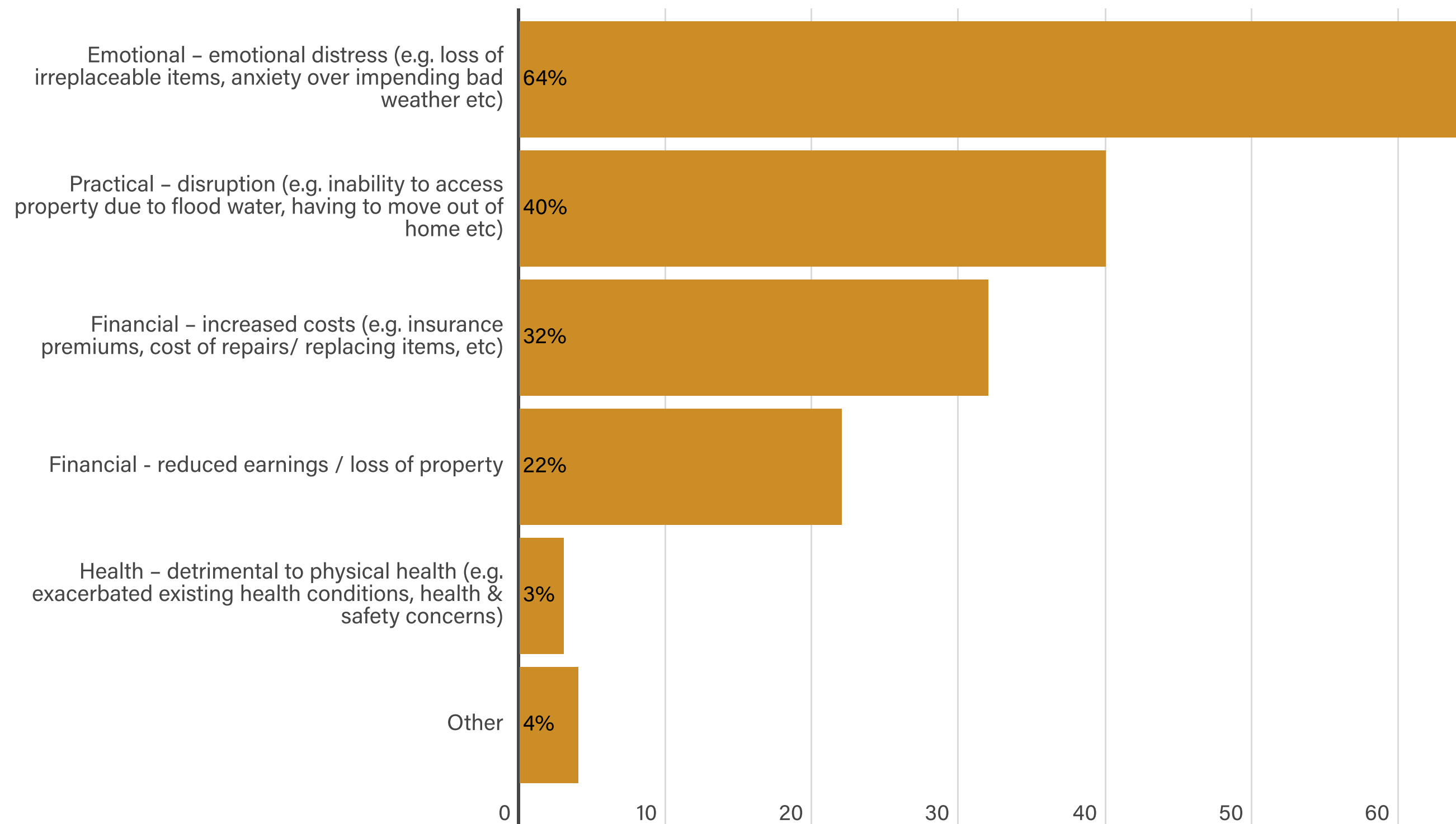
Ensured any debris away from drains, raised furniture, sandbags. All electrics have been moved half way up the wall. Fridge and freezer have been raised above floor. Everything stored in plastic boxes



What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=226)

# Coded descriptions of flooding impact to residents.

Impact of flooding incident(s) as described by residents.




Respondents were asked to describe the impact the flooding had had on them. These comments were then coded according to common themes.

Nearly two thirds of respondents reported experiencing emotional distress with a significant proportion of comments referring to severe anxiety over impending bad weather.

40% of respondents referred to the practical disruption the flooding had caused.

In terms of financial impacts, 32% of respondents referred to the costs they have incurred whilst 22% referenced the other financial losses they have suffered (e.g. loss of earnings and possessions).

 What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=237)



# Overview of flooding impact to residents.

”

Have had to move out of house while repair works carried out, House was ruined, we had only moved in 8 month prior. Have been in rented accommodation for months.

”

Extremely worried about the future adverse weather

”

Scared now every time we have heavy rain Financially we are worse off as insurance premiums have increased

”

We are very houseproud and have been working on the house for the last 21 years, it was absolutely beautiful and was destroyed in a few hours, it was heartbreaking and now every time we have heavy rain it's extremely worrying, the damage and losses were around £30000

”

Luckily insurance has covered the repairs, but has caused a lot of stress and we had to live in a damp house for 3 months whilst work was carried out with a 6 year old child with no functioning washing machine all during lockdown and restrictions

”

It has given many sleepless nights when the weather is inclement and cost money to replace items that weren't covered on insurance, plus the purchase of items to raise things off the garage floor.

”

I live alone - very worried the water will get into my property. Contemplating moving out of the area.



What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=237)

# Flooding to business premises.

# Overview of flooding to business premises.

## Extent to which flooding has occurred in or on business premises in Fylde



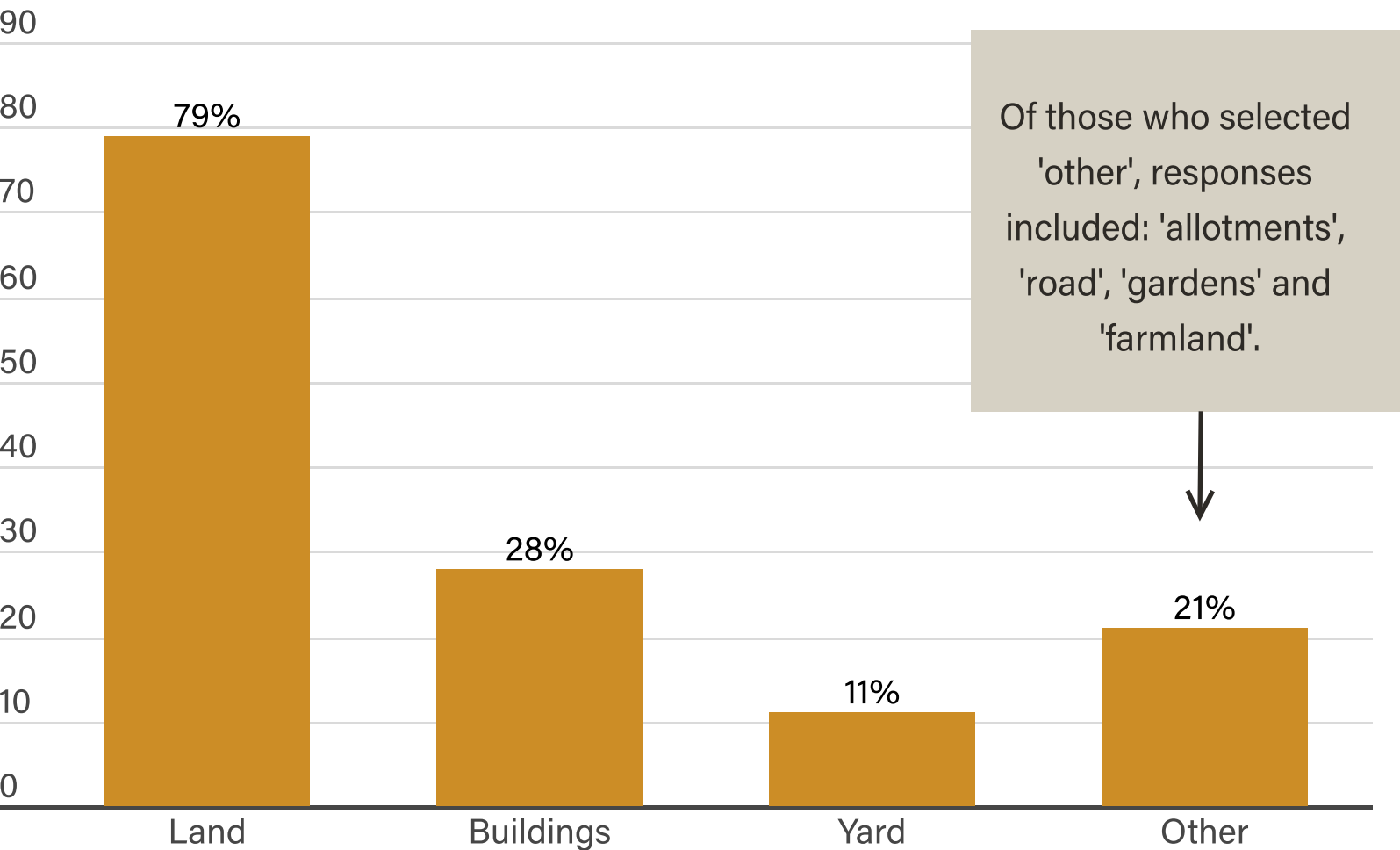
49

Respondents to the survey experienced flooding to their business premises



This equates to 18% of respondents having experiencing flooding in or on their business premises. However, we do not know what proportion of respondents own a business. Therefore this percentage could be higher.

## Specific area of business premises where flooding occurred



The majority of respondents who reported flooding to their business premises (79%) reported this having occurred to their land.



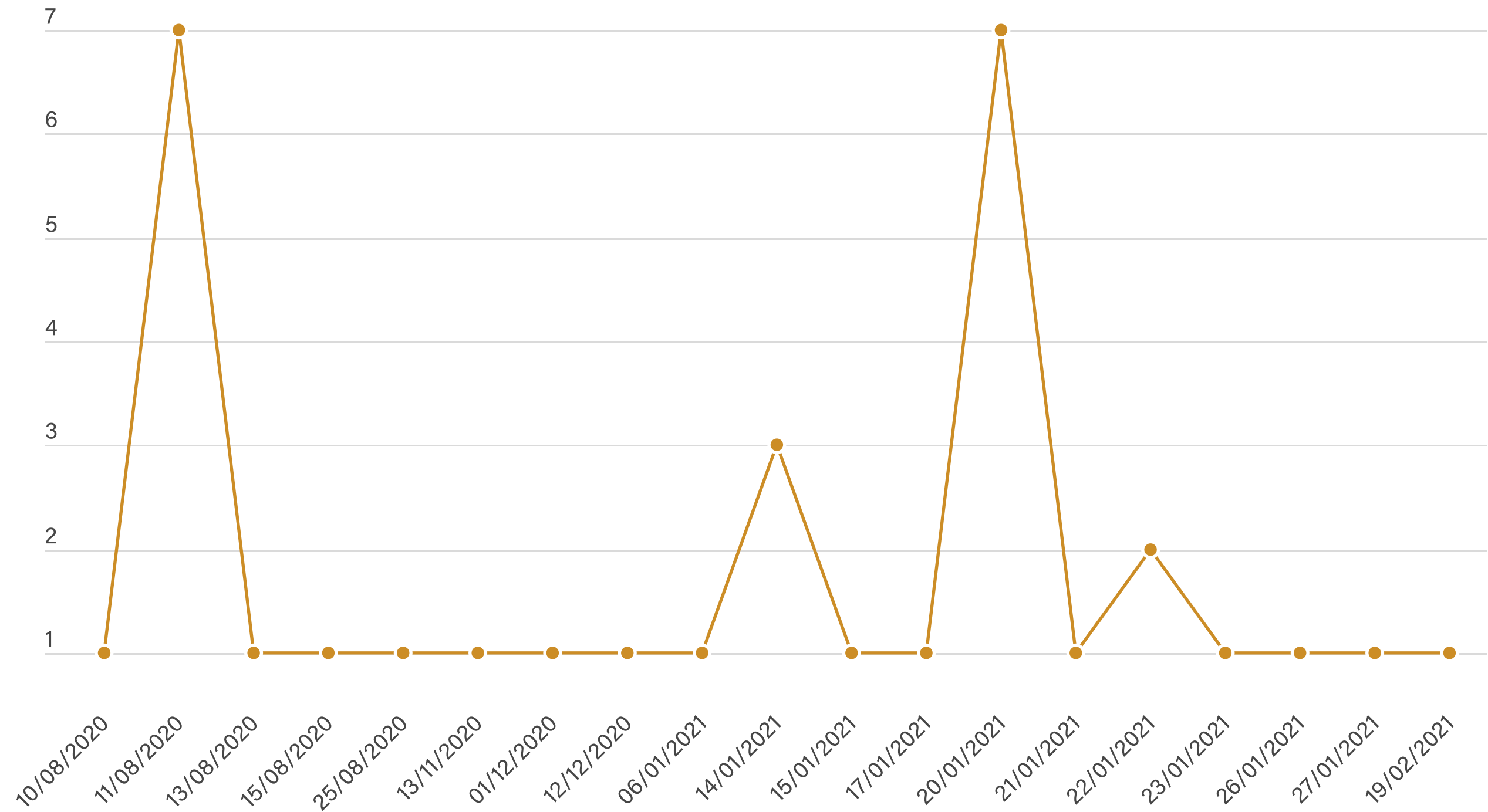
Has flooding occurred in/on business premises in the borough of Fylde? (n=318)



If yes to question 5, where exactly did this take place? (n=47)

# Timeline of flooding to business premises.

Count of specific dates where flooding occurred to business premises



In line with the flooding to home premises, the 11th August 2020 was recorded as a peak date by those who also reported flooding to their business premises.

Similarly, the 20th January 2021 was also reported by several of the respondents who reported flooding to their business premises.



What date(s) was this happen? (please input date format of DD/MM/YYYY) (n=34)

# Case studies of flooding incidents to business premises.



## Case Study 1 - repeated flooding incidents



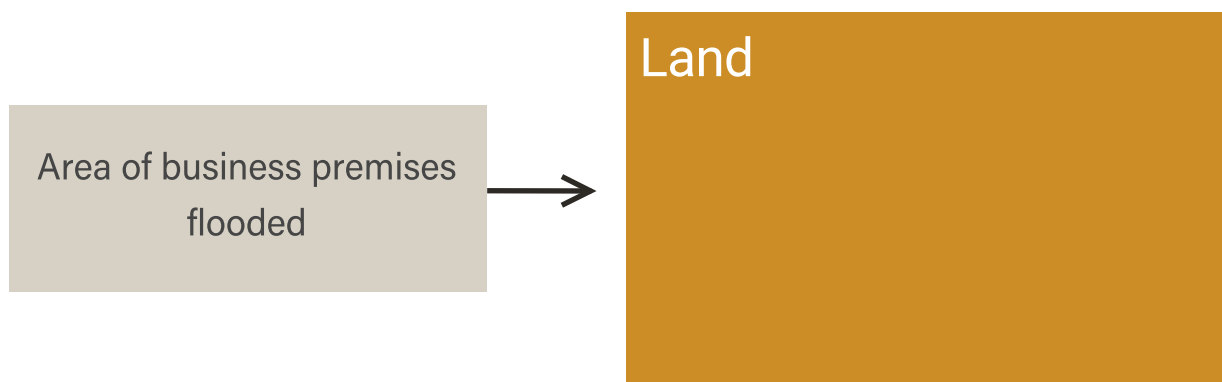
Aware of flood hub website

”

"This problem is a national problem but in the Fylde we have some outstanding farmland where we can grow anything given the opportunity. If this carries on with 20 years there will not be a farm left surrounding Lytham. Which nobody wants to see."

### Believed cause:

- Overflowing river or watercourse



## Case Study 2 - isolated flooding incident

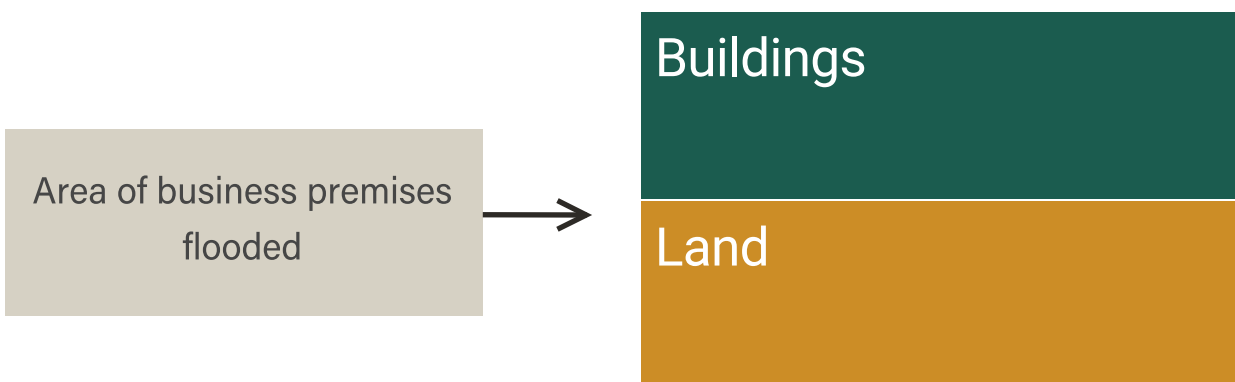


Aware of flood hub website

”

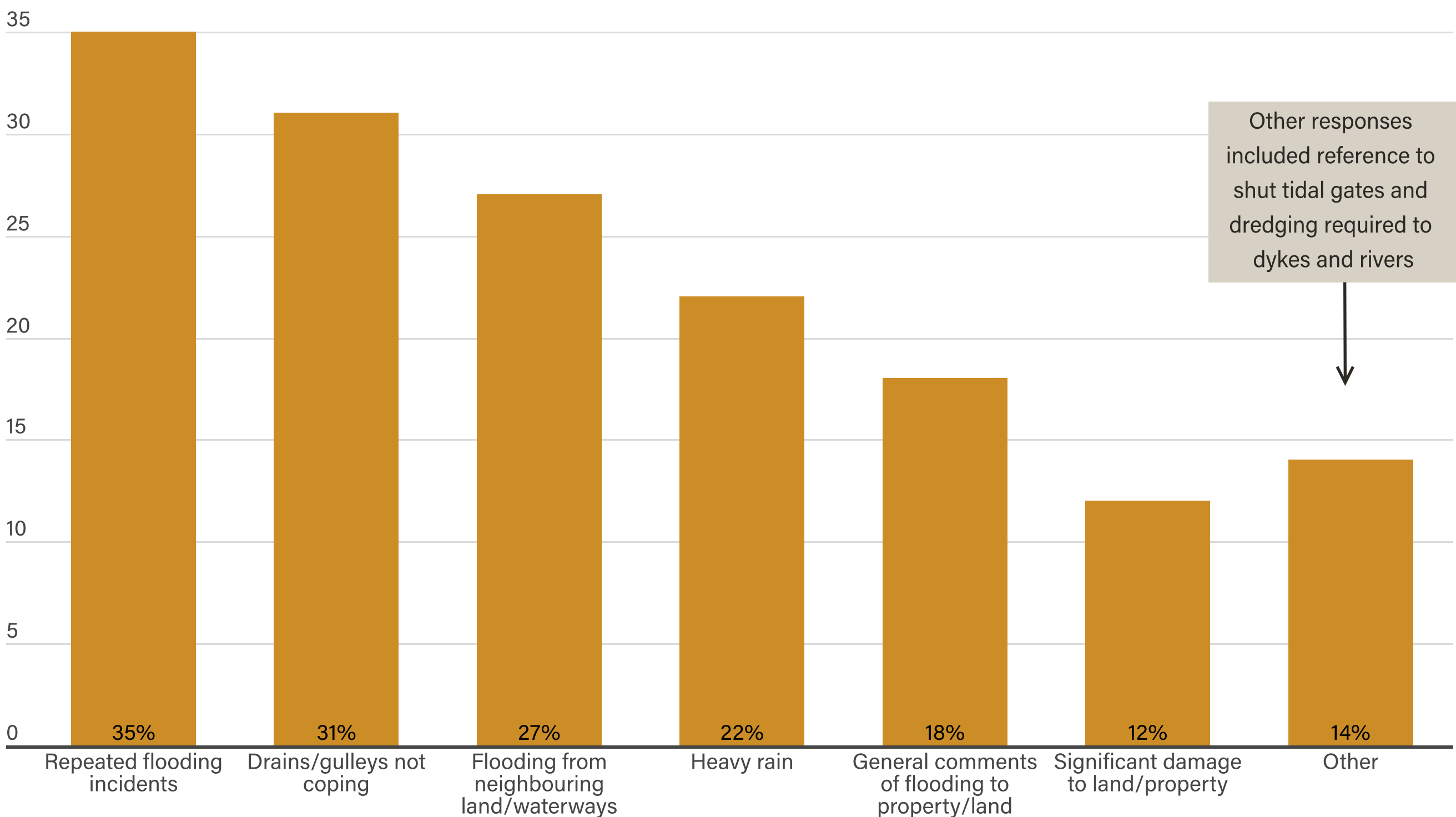
### Believed cause:

- Heavy rainfall
- Lack of clearing surface water courses



# Coded descriptions of flooding event(s) to business premises.

Respondents' description of what happened during flooding event (coded)




Respondents were asked to describe what had occurred during the flooding. These comments were then coded according to common themes.

35% of responses made reference to the fact that the flooding was not a one-off incident.

Just under a third referred to drains/gulleys not coping and 27% referred to flooding from neighbouring land/waterways.

22% of responses referred to heavy rain as a cause of flooding and 12% mentioned significant damage having been done to their land or property.

 Please describe what occurred? (n=49)

# Overview of flooding descriptions to business premises.

”

The church yard very badly flooded restricting its use as a graveyard

”

Due to the very high water table on the Fylde, our land (golf course) has significant amounts of surface water when the area has inclement weather, particularly in the last 5 years. As a result of increasing rainfall each autumn and through the winter our golf course floods regularly, resulting in the course closing and much lost revenue.

”

My business salon flooded all throughout, the water was like a river down the road, it came in under doorways and everywhere.

”

Extensive flooding of the ground floors of several buildings where research, development and testing is undertaken.

”

Land flooded and drowned a number of sheep, 80 sheep drowned in the last three years.

”

We farm land between Wrea Brook and main drain and every time it rains hard, Aug 2020, Oct 2020, Jan 2021, these watercourses cannot cope and overflow onto our productive farmland

”

Flooding throughout grounds to levels 12-17 inches deep, damage to approx 7 acres, and flooded into the bowling clubhouse, toilet block, and storage units



Please describe what occurred? (n=49)



# Map of flooding event(s) to business premises.

Areas where respondents noted flooding had occurred.



Of those who had experienced flooding to their business premises, 18 provided a postcode.

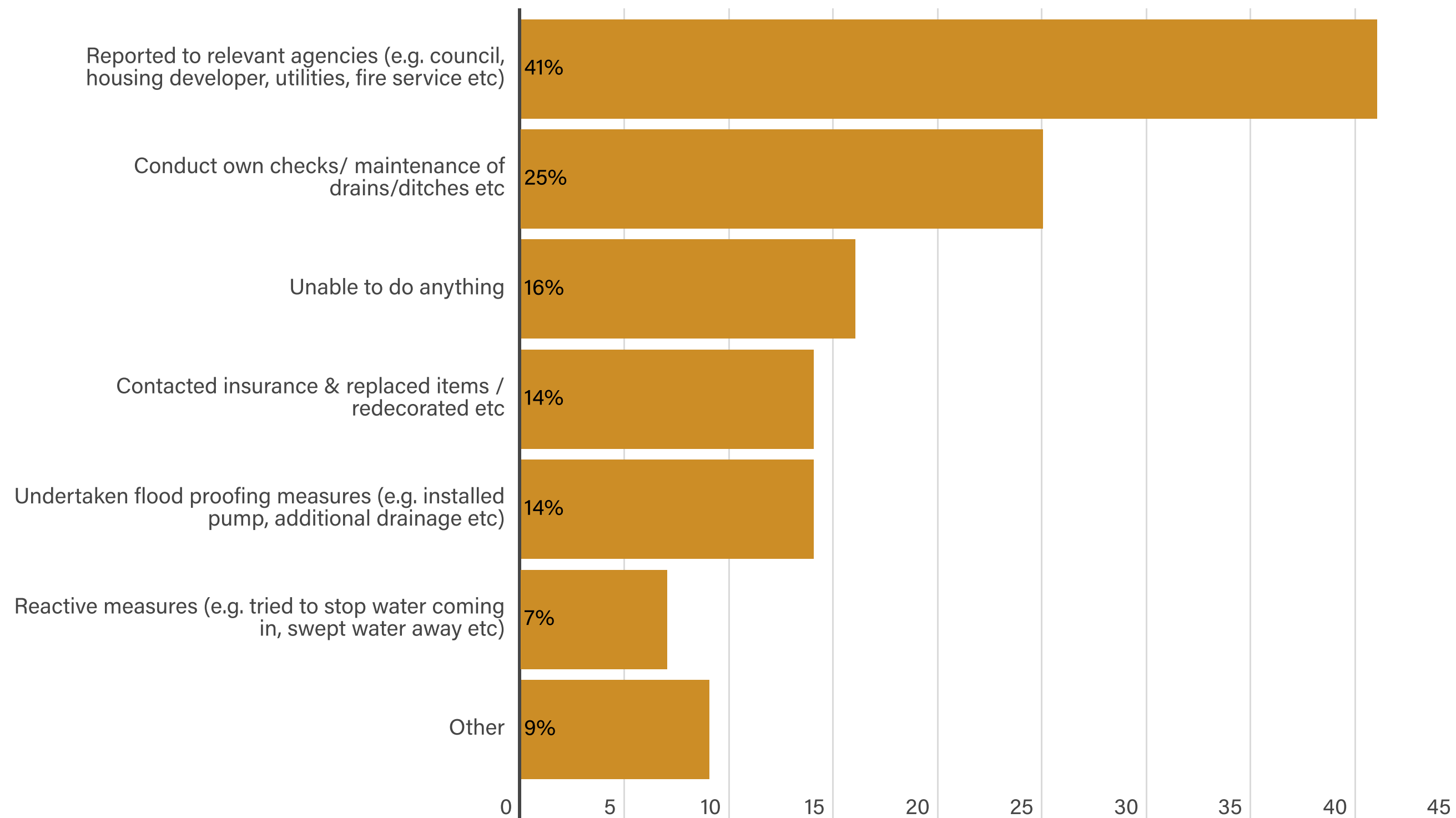
These postcodes have then been plotted onto the opposite map using an online tool.

Looking at the map, it can be seen that flooding incidents have occurred over a relatively wide ranging area with a small pockets of concentration in the Freckleton area (although caution needs to be exercised over interpretation of this due to the small response size for this question).



# Coded descriptions of business premises' course of action.


Course of action taken in by respondents experiencing flooding to their business premises before, during & afterwards



Respondents were asked to describe what had occurred during the flooding. These comments were then coded according to common themes.

In line with the course of action taken in relation to flooding to home premises, the majority of responses (41%) referred to business owners reporting the flooding or concerns about potential flood risk to the relevant agencies.

A quarter revealed conducting their own checks and maintenance of drains and ditches and 14% stated they had undertaken flood proofing measures.

 What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=44)

# Overview of business premises' course of action.

”

After the flood I needed to get a wet vac man out to suction all the floor area, it was a big clean up operation.

”

On my land the usual maintenance of dykes and outfalls etc.

”

Pumping water off the field when water course had dropped sufficiently, ready for the next lot of water

”

If we know there's a chance of flooding we have to move vehicles tools and I can't operate my car wash business and now my insurance wont cover my business for flooding - some years it has flooded more than 10 times, the mess it leaves behind is horrendous and we clean it up

”

After the flood I had to rip all carpets up, throw away interior sample books, display units and remove damaged wood at the front - it took over a month to dry the shop out. I've had to replace flooring and repair and replace display stands. My insurance did not pay out for the repairs.

”

Reported to Lancashire County Council and on previous occasions have dug out the verge to provide a drainage channel from the road for floodwater.

”

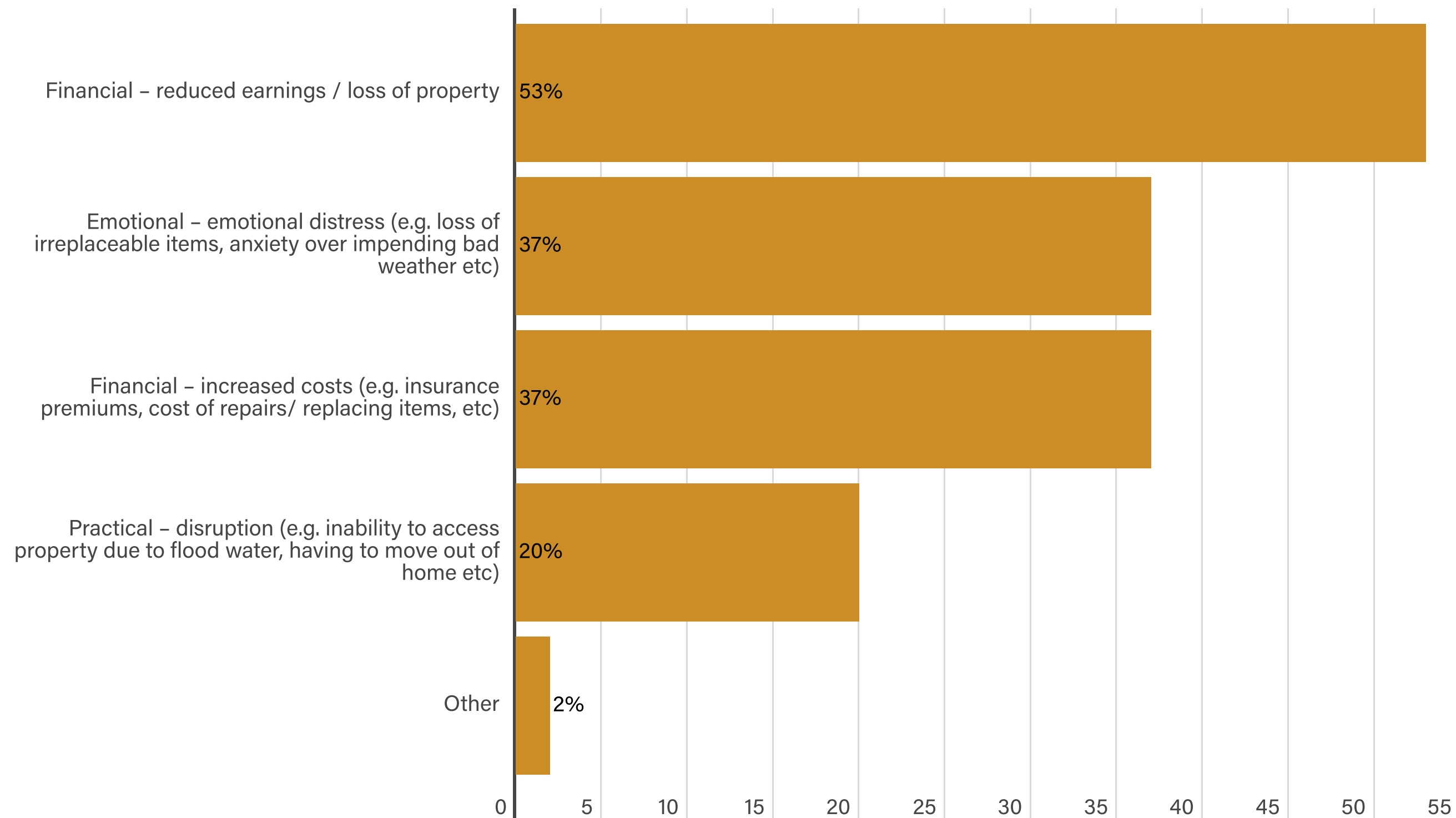
I had extra drainage and sumps dug in my front garden ,but even these can not cope. The issue has been reported to my MP



What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=44)

# Coded descriptions of flooding impact to businesses.


Impact of flooding incident(s) as described by businesses.



Respondents were asked to describe the impact the flooding had had on them. These comments were then coded according to common themes.

In terms of financial impact, over half (53%) of those who had experienced flooding to their business premises reported suffering reduced earnings and other financial losses and 37% reported having incurred increased costs.

37% of respondents who had experienced flooding to their business premises also experienced emotional distress as a result whilst 20% referred to the practical consequences.

 What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=48)

# Overview of impact on businesses.

”

I paid over £600 for extra drainage which has still not removed the issue. I am a 97 year old pensioner and can not afford to pay out anymore .

”

Its so depressing watching my business suffer and the worry everytime it rains slightly heavy, cost can be anything from a £100 to £300 upwards each time it floods outside on the car wash when it entered the garage it cost thousands

”

Farmland is saturated and capped, less productive, regular reseeding of the flooded areas at our expense

”

Impacts on the ability to work on the site and open the site to public

”

Totally soul-destroying.

We have lost half our winter sowing of crops the last 2 winters. We have had to re-cultivate, re-sow and add extra fertilizer and weed sprays. Further subsequent flooding has drowned the re-sowing again !

”

Huge financial impacts to our business

”

Totally stressful, and worry about it happening again as this is about the 4th or 5th time. Financial worries, especially the insurance premium. The mess and muck is stressful.

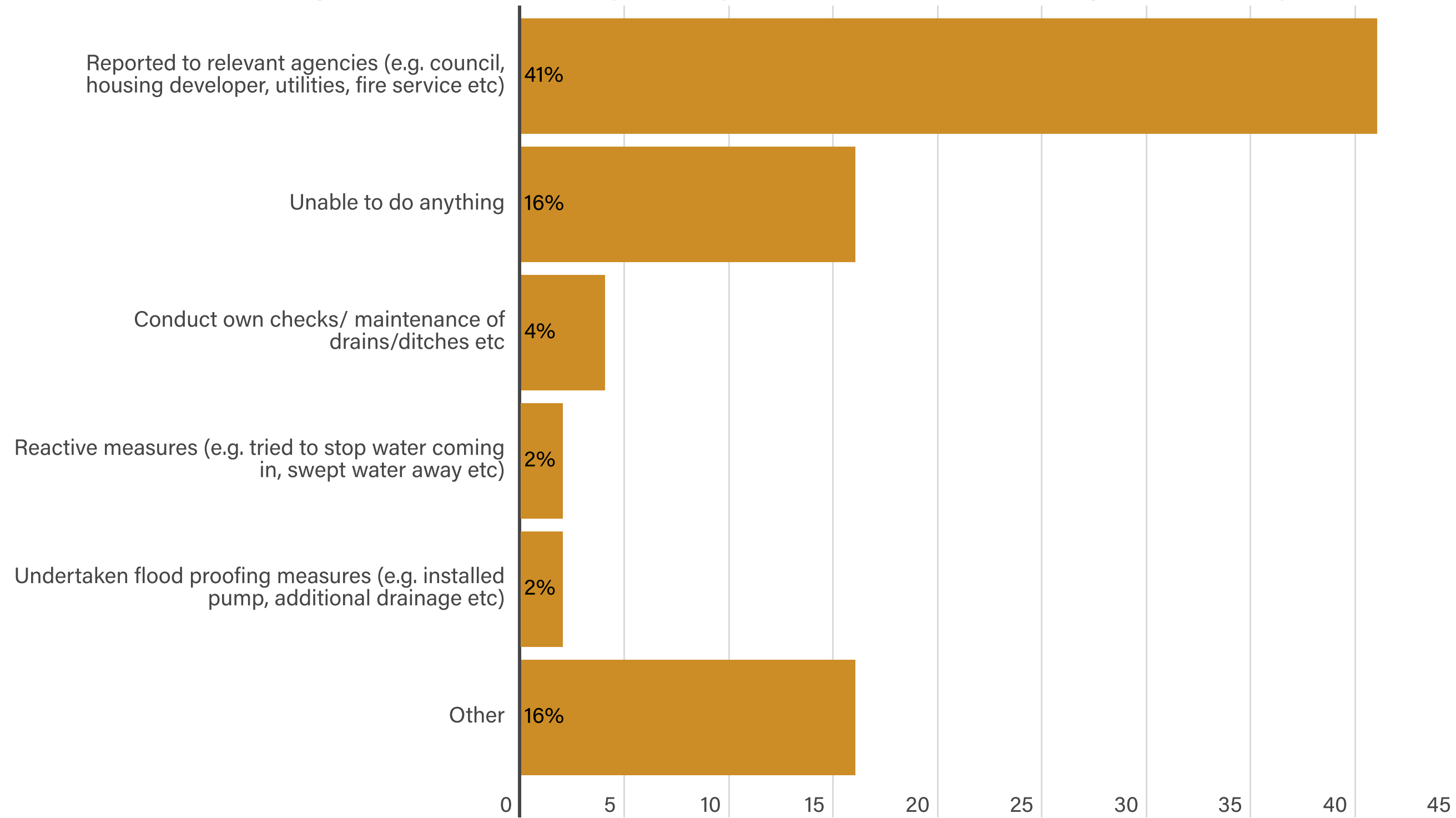


What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=48)

# Other feedback on flooding.

# Coded descriptions of other respondents' course of action.

Course of action taken by residents experiencing flooding to public land in their locality before, during and afterwards



Respondents were asked to describe what had occurred during the flooding. These comments were then coded according to common themes.

The chart opposite shows residents who had not experienced flooding to their home or business premises but instead to public land in their locality.

Similar to earlier findings, 41% of responses referred to reporting the flooding or concerns about potential flooding to the relevant agencies either before, during or after the flooding had occurred.



What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=49)

# Overview of course of action taken by other residents.

”

Last year the severe weather event resulted in us contacting United Utilities and Highways Agency who both rectified the immediate problem.

”

The flooding is not on the property but on the Lane to the property which has resulted in problems with access to the businesses and residents.  
We regularly keep what drains there are clear of leaves and keep the ditches in good order. We have no mains drains and what drains there are are blocked and these only drain to already overflowing ditches.  
Fundamentally there is no where for the water to go.

”

Cleared some of the grids in the lanes whilst out walking.

”

I emailed county council flood team

”

Not possible. Flooding is a threat to car safety and re-routing necessary. Flooding can also make access on foot difficult, hazardous and, at times impossible.

”

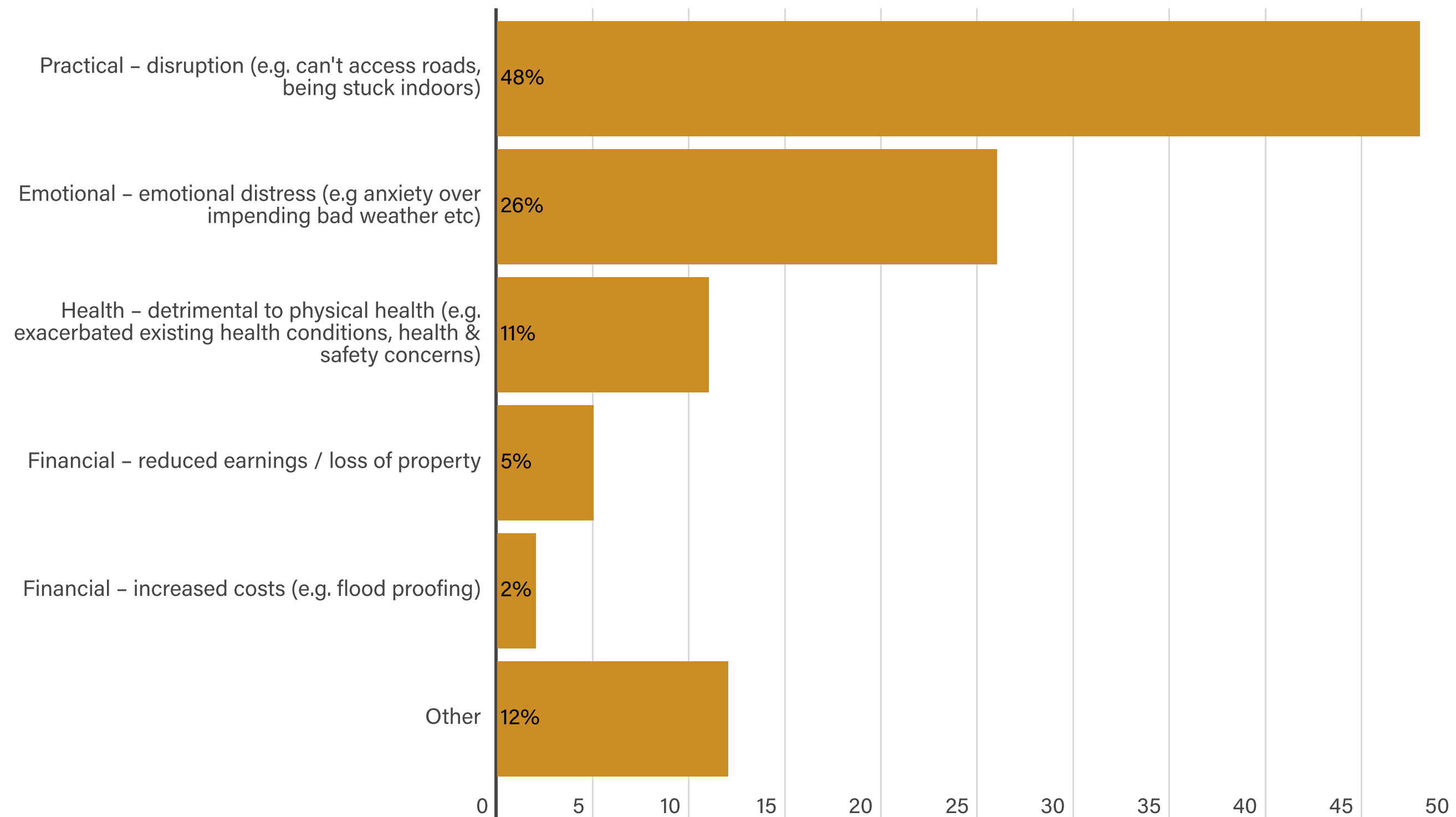
Reported to the Borough council, for remedial or regrading work to be undertaken.



What cause of action or response did you take in relation to the flood (prior to the flood / during the flood / after the flood)? (n=49)

# Coded descriptions of flooding impact to other respondents.


Impact of flooding incident(s) as described by respondents who were reporting on flooding in their local area.



Respondents were asked to describe what course of action they had taken in relation to the flood - before, during and afterwards. These comments were then coded according to common themes.

The chart opposite shows residents who had not experienced flooding to their home or business premises but instead to public land in their locality.

Just under half of responses referred to the practical disruption the flooding had caused with many comments referring to blocked access to path or roadways or being stuck in their homes.

 What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=66)



# Overview of flooding impact on other residents.

”

Stress from being isolated, not being able to get to local shops or on a couple of occasions not able to get a few hundred yards from the home using a car.

”

Drain overflow at entrance to estate has sewage in. The water flows further into the estate and taken in by cars and on shoes. Many residents have children and pets. This sewage running into the estate is a health and hygiene hazard.

”

Having to travel the long way round to avoid the flooded areas.

”

None other inconvenience in entering drive to property

”

The impact is very emotional seeing my Mothers grave flooded. I can't approach the grave sometimes because of deep water around the area of the grave

”

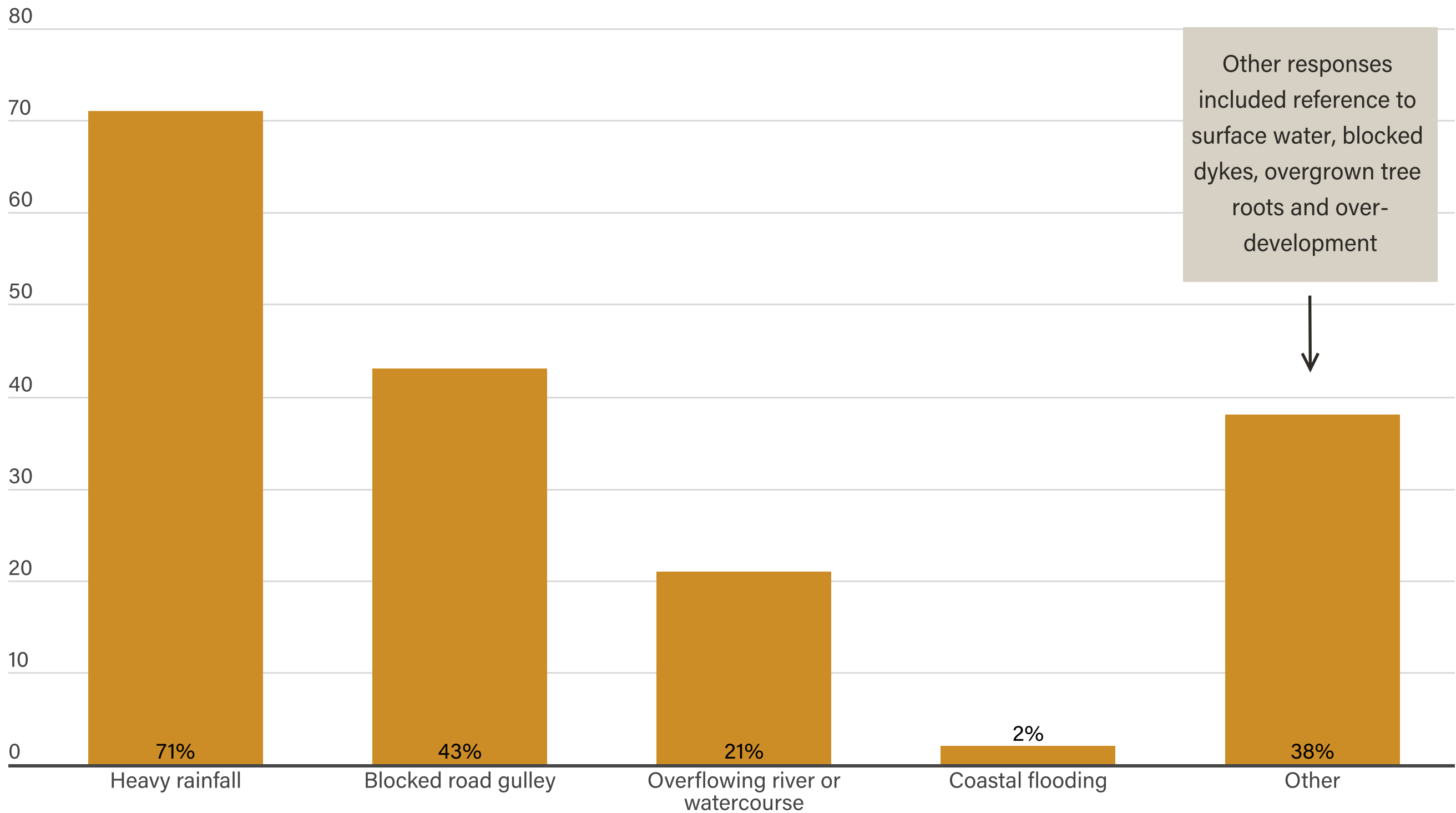
Constantly having the roads to my house flooded, will eventually ruin my car



What impact has this flooding had to you (e.g. emotional, financial, etc.)? (n=66)

# Cause of flooding event(s).


Respondents' opinions on the cause of flooding events (including flooding to home, business and public areas)



Respondents were provided with a multiple choice question asking them to select their perceived cause of the flooding, giving them the option to elaborate if they selected 'other'.

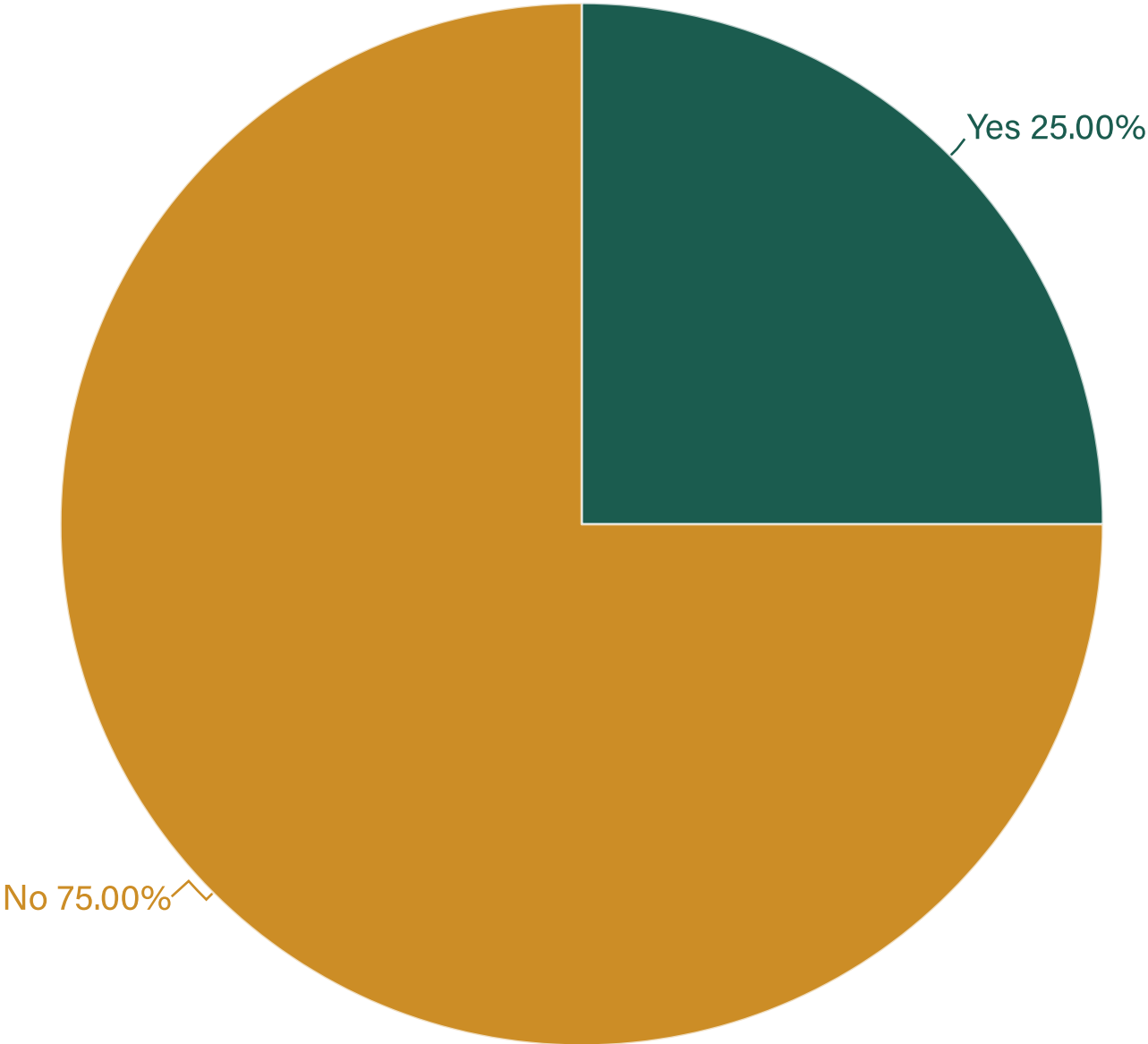
In line with the data presented above, heavy rainfall and blocked road gulleys are commonly noted to be the cause of flooding incidents with 71% and 43% of respondents selecting these options, respectively.

It is important to note that the data in the opposite chart does not differentiate between flooding that has occurred to home, business premises or public land.

 Do you know what was the cause of the flooding above? (n=304)

# Awareness of the Flood Hub website.

Whether or not respondents have heard of the Flood Hub website



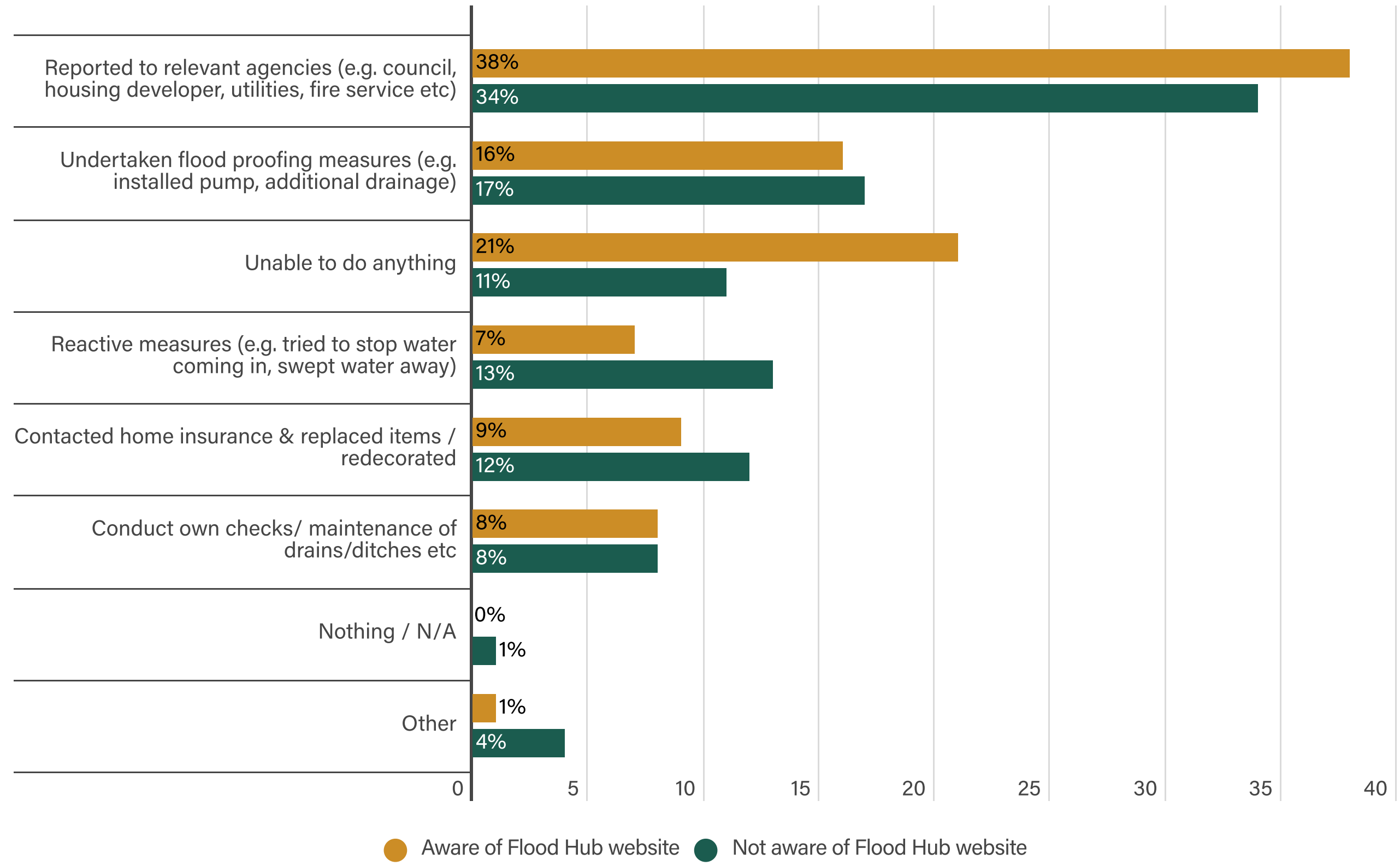
75% of total respondents had not heard of the Flood Hub website.



Are you aware of the Flood Hub website (<https://thefloodhub.co.uk/your-local-area>) that provides information and resources to support householders, businesses and communities across the North West... (n=318)

# Course of action compared to awareness of Flood Hub website.

Respondents' course of action in relation to the flood compared with their awareness of the Flood Hub website.



The chart opposite shows the course of action followed by all respondents in relation to the flooding compared to their awareness of the Flood Hub website.

When looking at the chart, it can be seen that residents aware of the Flood Hub were slightly more likely to contact relevant agencies than those who had not, although this difference is only small.

In addition, residents who were aware of the Flood Hub website were almost twice as likely to feel that they were unable to do anything compared to those who had not.

**View the online report**

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