

# Citizen Participation and Climate Behaviour in the Stadsbeek Project

## *Survey Results*



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**Interreg**  
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# Summary

## Introduction

In the Stadsbeek project, the municipality of Enschede has taken measures to tackle the water problems in the Stadsveld and Pathmos districts. Measures were taken in the public space and the residents were encouraged to take measures themselves. To evaluate the project approach, researchers from the University of Twente and the municipality of Enschede developed a survey. This survey was distributed among the residents of the area in the summer of 2021. The survey targeted a number of issues: (1) how residents experienced the project and public participation running alongside it; (2) to what extent they have taken, or want to take, measures themselves; and (3) what motivated residents to take measures. This report is a follow-up of an earlier report (April 2021) which catalogued and described public participation throughout the project with regard to, among others, breadth, depth and intensity of the participatory activities.

## Theoretical Framework

The survey is based on a theoretical framework. Central to this framework are the factors that influence adaptation behaviour. We looked at public participation as well as other factors such as risk perception, social norms and previous experience of water nuisance. Before we look at the relevant factors, we first define adaptation behaviour for the purposes of this study in part 1). Part 2) explains behavioural change, part 3) the influence of participation on adaptation behaviour and part 4) the influence of risk perception and social norms. The survey mirrors these aspects in its five parts. The results are explained per section below.

## Survey Part 1: Background and Living Situation

First of all, the background and living situation of the respondents were mapped out. These include age, gender, level of education, household size, house ownership and other questions related to the property, as well as attitudes towards risk-taking and personal responsibility. A comparison of the answers with the available statistical data on district or city level shows that the survey is not fully representative. Homeowners were the focus of the survey, and as a result homeowners (as opposed to renters) were over-represented and those aged 15-25 were under-represented. In addition, respondents with a university degree or higher were over-represented as well. Attitudes towards risk show that residents are reasonably cautious. And attitudes towards personal responsibility show that most respondents feel at least somewhat responsible to adapt their property.

## Survey Part 2: the Stadsbeek Project

The second part of the survey focused on the Stadsbeek project, including the construction measures and the participation activities. About half of the respondents do not know whether the project is sufficient to prevent water nuisance. Of the activities designed to involve residents, the newsletter is the most well-known. The Bouw-App (EN: construction app with information about the project) was also used relatively often by the respondents. The same number of respondents mentioned information meetings and the neighbourhood concierge. Respondents used the groenblauw Enschede website ([www.groenblauwenschede.nl](http://www.groenblauwenschede.nl)) and the design sessions least often. The results show that respondents who participated in an activity almost always read the newsletter as well. In general, residents rate the participation activities favourably, especially if they used them.

## Survey Part 3: Contacts in the Neighbourhood

The third part of the survey focused on contacts in the neighbourhood and social norms. The vast majority is not active in associations or clubs in the neighbourhood. However, there is a lot of relatively superficial contact between residents, and a relatively large number of respondents

indicated that they pay attention to each other's property. Respondents are attached to their neighbourhood. They also pay attention to the appearance of their own and their neighbours' houses.

#### **Survey Part 4: Experience of Water Nuisance**

The fourth part examined residents' risk perception and experiences of water nuisance. The majority of the respondents indicated that they had experienced water nuisance. The majority had also experienced slight damage. While most residents indicated that they did not expect any damage to their property, the majority was slightly worried nevertheless.

#### **Survey part 5: Measures to Prevent Water Nuisance**

The fifth part concentrated on respondents' familiarity with five green or blue measures and their implementation on respondents' properties. The following measures were included in the survey: 1) decoupling of rainwater pipes, 2) removal of pavement, 3) setting up a rain barrel, 4) planting trees and 5) constructing a green roof. Respondents are less inclined to implement measures that cost more money (green roof) and more inclined to implement measures that are relatively cheap and easy to implement (decoupling and pavement removal). Prevention of water nuisance is the most frequently mentioned reason for decoupling the rainwater pipe. For other measures, reasons such as conserving water, more green, or even aesthetics are more relevant.

#### **The Influence of Participation and Other Factors**

We set out to answer the question "*How can citizen participation (in combination with other factors) contribute to the implementation of climate adaptation measures by residents on their own property?*" The anticipated relationship between the level of participation and the extent to which residents implement measures did not bear out. However, a number of participation activities do show striking results. The newsletter is widely read. Only 2 respondents who participated in another participation activity indicated that they did not read the newsletter. Respondents who visited the website [www.groenblauwenschede.nl](http://www.groenblauwenschede.nl) relatively often indicated an intention to take measures. The neighbourhood concierge appears to be an effective way to increase the uptake of decoupling rainwater pipes among residents. It was also striking that respondents who had experienced financial damage due to water nuisance were twice as likely as other respondents to take additional measures. Age is another factor that can play a role. Older people have taken measures relatively often but have less intention to do so in the future.

#### **Recommendations**

Residents can contribute significantly to adapting the environment to climate change. To encourage residents to take measures, we recommend that the municipality of Enschede, when designing participation activities, should: 1) be explicit about encouraging residents to take measures; 2) seek connection with the various motives of residents to take measures; 3) support residents so that they gain more confidence in their own capacity; and 4) ensure monitoring and evaluation. We hope that the broad participation approach adopted by the municipality of Enschede in combination with these recommendations will be a source of inspiration for other municipalities.

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## 1. Introduction

To tackle the water problems in the districts Stadsveld and Pathmos, the municipality initiated the Stadsbeek project. For the implementation and evaluation of the last part of this project, the municipality and water board Vechtstromen submitted a successful subsidy application to the implementation programme of the Deltaprogramma Ruimtelijke Adaptatie (DPRA) (EN: Delta Programme for Spatial Adaptation). A number of earlier participation activities were carried out as part of the INTERREG North Sea Region project CATCH. In the context of the desired development of knowledge related to these subsidy projects, researchers from the University of Twente were commissioned by the municipality to examine the role of public participation taking place alongside the implementation of the construction project. This report was written within the framework of this research project.

The research project resulted in two reports. The first report gives an overview of the breadth, depth, and intensity of public participation in different phases of the project (see Warbroek et al, 2021). This second report presents the results and analysis of a survey. The goal of the survey was to gain insight into residents' experience of the project and its public participation, as well as extent to which this influenced the attitudes of residents towards implementing climate adaptation measures to prevent water nuisance on their own properties.

### *Approach and Method*

Based on existing literature, the researchers developed a theoretical framework. This framework was discussed with officials from the municipality of Enschede in a workshop on April 22, 2021. This framework then built the basis for the development of the survey. Subsequently, the survey questions went through several rounds of revisions within the project team, including language experts from the municipality. Finally, several civil servants, students and acquaintances of the researchers tested the online version of the survey. Distribution of the survey took place from the end of June to mid-July 2021 and from the end of August to the beginning of October of 2021. Student assistants went from door to door and handed out flyers and distributed additional flyers in the district (see Annex A for the list of streets). Information about and access to the survey was also published in the Stadsbeek newsletter (approx. 3500 households), the district newspaper Zuidwester and three times in the Bouw-App which the municipality uses to communicate with the residents of the district (approx. 250 users). If desired, residents could receive help on site, or by telephone, to complete the survey. Two people made use of this option. The survey was completed by 88 individual households (approximately 10% of the total of 900 households in these postcode areas). Five households completed the survey more than once.

### *Structure of the Report*

The structure of this report is as follows. Chapter 2 introduces the theoretical framework. Chapters 3 to 7 present the results for each part of the survey: Part 1: Background and living situation; Part 2: The Stadsbeek Project; Part 3: Contacts in the neighbourhood; Part 4: Views on water nuisance; Part 5: Adaptation Measures. Chapter 8 explains the relationship between public participation and residents implementing adaptation measures according to the findings of the survey. The report concludes with conclusions and recommendations. The appendices provide an overview of respondents per street, instruments for behavioural change, the survey questions (in the original Dutch) and the responses per street regarding the decoupling of rainwater pipes.



## 2. Theoretical Framework

The municipality of Enschede would like to know what encourages residents to take measures to adapt their property to a changing climate (also known as: adaptation measures and adaptation behaviour). This research aims to identify the factors that influence this. In particular, we focus on the role of public participation. In this research, we want to answer the following question:

*“How can public participation (in combination with other factors) contribute to the implementation of climate adaptation measures by residents on their own property?”*

In our research, we have mainly looked at green and blue measures. We did not only look at the influence of public participation on adaptation behaviour, but also investigated other factors, such as risk perception, social norms, previous experience with water nuisance or expectations from friends or family. Before we discuss the relationships between these variables (the theoretical framework), we will first explain the two main concepts separately: 1) adaptation behaviour, and 2) behavioural change. We first discuss the influence of participation on adaptation behaviour. After this, we discuss the influence of risk perception and social norms.

### *Adaptation Behaviour*

Adaptation behaviour is a central aspect of this research. Thus, we first want to define adaptation behaviour for the purpose of this study. Adaptation behaviours refer to measures taken to reduce the impacts of for instance extreme weather events, such as flood preparedness. Just as the municipality is implementing measures like the Stadsbeek to reduce water nuisance, individual households can take measures on their property to reduce water nuisance for their own property but also to reduce water nuisance in the neighbourhood, if implemented by enough households. The municipality is especially interested in that last category. They try to encourage enough households to take measures on their property so as to reduce water nuisance for the neighbourhood. Together with the municipality, we identified five relevant measures:

1. Decoupling rainwater pipes;
2. Taking out pavement and greening gardens;
3. Setting up rain barrels;
4. Planting trees;
5. Installing green roofs.

These are the adaptation measures we investigate in this research and what we refer to as adaptation behaviour. This is not an exhaustive list of possible measures. However, we wanted to keep the survey as short as possible and therefore limited our selection.

### *Behaviour Change*

To change behaviour, a person must first of all be motivated to change the behaviour. Secondly, a person must have the ability to change the behaviour, i.e. the time, money, and knowledge to implement the measures. If both of these are present, a person then forms an intention as a precursor to implementing the measure (compare Figure 1).

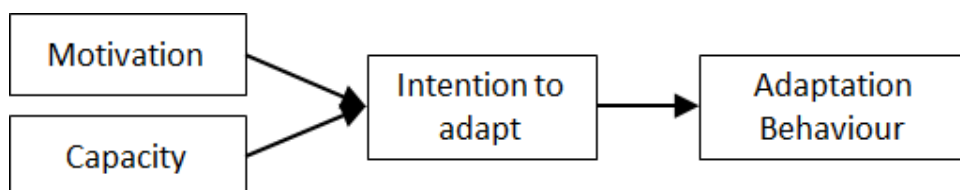


Figure 1: Model of factors that lead to adaptation behaviour (adapted from: Mosler en Tobias, 2007).

### *The Influence of Participation on Adaptation Behaviour*

There is very little existing research on the use of participation to increase adaptation behaviour. We therefore looked at a neighbouring field, environmental psychology, which investigates ways to influence behaviour towards more sustainability, for example behaviours such as installing solar panels. This research (Mosler en Tobias, 2007) has identified a large number of instruments that can influence behaviour. There are two broad categories of instruments: First, instruments triggering behaviour change. These instruments target the first step of the behaviour change model as depicted in Figure 2. One instance of such measures would be subsidies for private households to install green roofs. This increases a household's capacity to take the measure. The second category of instruments encourage behaviour change. These work when people have already formed the intention to implement a measure. One example would be a reminder, such as seeing a display of rain barrels at the garden centre right before the checkout. Annex 2 provides a full overview of possible instruments.

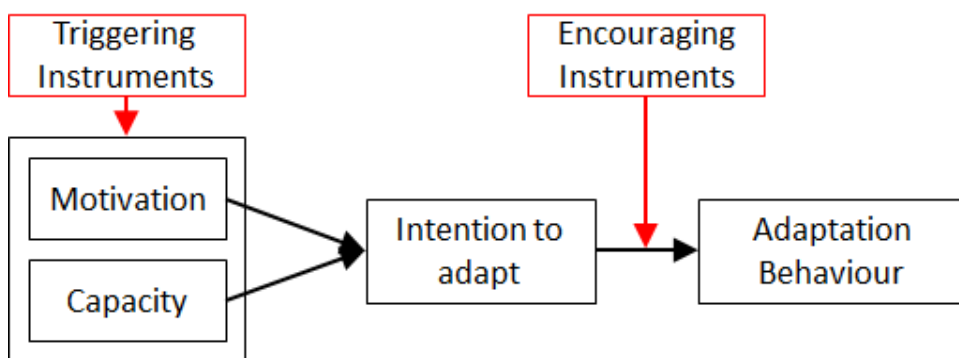


Figure 2: Model of factors that lead to adaptation behaviour including the instruments (adapted from: Mosler en Tobias, 2007)

In the first report for this project (Warbroek et al, 2021), we identified a number of participation instruments that the municipality employed over the course of the project. For this part of the research we focussed on the following:

- The newsletter of the Stadsbeek project;
- The website [www.groenblauwenschede.nl](http://www.groenblauwenschede.nl);
- The Bouw-App;
- Presence at one or more information meetings about the Stadsbeek project between 2016 and 2020;
- Presence at design sessions for the construction of the Stadsbeek or the gardens on the Rembrandtlaan or the Pinkeltjesplein;
- Contact with the buurtconciierge (EN: neighbourhood concierge).

These instruments vary on a number of characteristics, such as intensity. For more details, please refer to the first report, figure 1, page 5. For example, talking to the neighbourhood concierge in person is much more intense and interactive than reading the newsletter. People could also use more than one of these instruments so they might have been targeted multiple times or just once. We assume that these differences might lead to differences in adaptation behaviour.

### *The Influence of Risk Perception and Social Norms*

This last part of our framework is based on an existing stream of literature called “Protection Motivation Theory” (cf. Grothmann en Patt, 2005). As the name implies, this theory studies why people take actions to protect themselves from possible future harm. For example, why some people



in an area that is flood prone buy insurance, adjust their houses, etc. whereas other people in the same area that are affected in the exact same way do not undertake any kind of protective measures.

Just as with behaviour change in general, protection motivation consists of two main components that lead to an intention to take measures: Risk perception, i.e. someone's motivation, and coping appraisal, i.e. someone's perceived ability to take effective action. Both will be explained briefly.

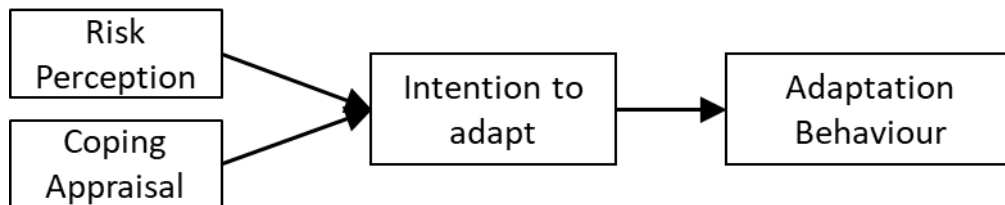


Figure 3: Factors leading to the intention to take measures (adapted from: Grothmann en Patt, 2005, p.204).

### Risk Perception

Risk perception refers to the thoughts and feelings a person has about a possible risk. This is different from their actual objective risk. The perception consists of three components:

1. The amount of damage a person thinks will occur from a risk, i.e. damage to the house from flooding;
2. The perceived frequency of the damage occurring, i.e. how often will the house get flooded;
3. Worry about this damage.

People form risk perception based on their perception of the world and their feelings about their situation in it: previous experiences with a hazard, negative affect, trust in a government response, beliefs about the hazard, and place attachment.

### Coping Appraisal

Coping appraisal refers to a person's views on their ability to make changes that will protect them from the risk they perceive. Again, there are several components to this:

1. Their perceived self-efficacy, i.e. does the person think, they have the ability to take any given measure;
2. The outcome efficacy, i.e. does the person think any given measure will be effective in reducing or preventing harm;
3. The perceived cost of a measure.

The objective resources (time, money, knowledge) available to a person for taking protective measures influence this subjective appraisal. If a person has no money in their bank account, any measure will seem costly. If someone has a lot of disposable income, even expensive measures become affordable.

### Social Norms

One thing that can influence all of these factors in different ways are social norms. Social norms refer to the unwritten rules we all experience when we interact with other people. For this study, we consider two types of norms: injunctive norms, and descriptive norms. Injunctive norms describe other people's judgement of our actions and our reaction to that judgement. For example, someone's family considers flood protection measures a waste of time and money and would judge that person for taking such measures. This might dissuade the person in question from taking action. Descriptive norms refer to our observation of other people's behaviour and our reaction to the

observation. For example, many the neighbours are taking a particular measure to protect themselves against flooding. This might convince another person in the neighbourhood that they, too, have the ability (and responsibility) to take this measure. The newsletter of the Stadsbeek project uses these norms as communication tools, when it describes households that have their rainwater pipes decoupled by the municipality (see Figure 4). The first half of the article deploys descriptive norms in the form of an example. In the second half, the article shows how the municipality has increased the residents' ability to take this measure, by offering decoupling as a service to the respondents along the Stadsbeek.

## Nieuwsbrief

# Project Stadsbeek



## Veel regenpijpen doorgezaagd

Op woensdag 3 maart werd de eerste regenpijp in de Elferinksweg doorgezaagd bij bewoner Marja Stinenbosch. "We zijn erg betrokken bij project Stadsbeek dus we laten graag onze regenpijp afkoppelen," vertelt Marja. Regenwater van haar dak stroomt nu via de tuin naar de Stadsbeek en niet meer naar het riool.

De afgelopen weken ging buurtconciërge Eef Kuiper langs de deuren in de Elferinksweg. Hij deed bewoners een mooi aanbod: laat uw regenpijp door ons afkoppelen en help mee de Stadsbeek te vullen. Wel 94% van de bewoners is enthousiast en doet mee. Een geweldig resultaat! Ook Sylvia Schot, projectleider van project Stadsbeek, is tevreden: "Ik vind het mooi te zien dat we op deze manier samen met bewoners wateroverlast in Enschede aanpakken."



Figure 4: Stadsbeek project newsletter highlighting the decoupling of rainwater pipes by homeowners.

## Synthesis: Theoretical Framework

The various factors and relationships described above comprise the theoretical framework shown in Figure 5. Many factors can influence a person's path towards taking adaptation measures, providing different points of entry for different participation strategies (as depicted by the red arrows).

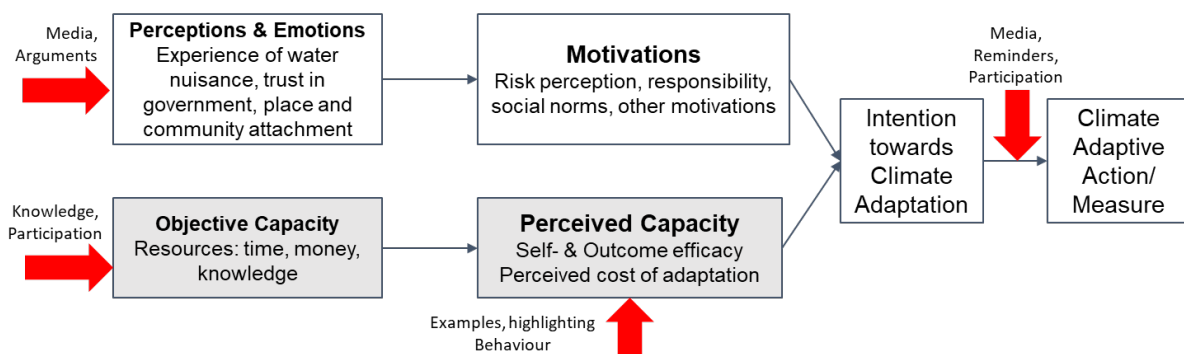


Figure 5: Theoretical framework including instruments (indicated by red arrows) (adapted and based on: Grothmann and Patt, 2005, Mosler and Tobias, 2007).

### 3. Survey Part 1: Background and Living Situation

In this first part of the survey, we asked questions about three topics:

- Personal information about the respondent: Age, gender, and education;
- Information about their living situation: Household size, dependents, house type, house maintenance, house ownership, as well as move-in date and future plans to move;
- General attitude towards risk taking and personal responsibility.

The answers to these questions serve a double purpose: First, we are able to determine how representative our sample is compared to the district as a whole. These data are publicly available through the kadaster. Additionally, it allows us to control for variables that might influence adaptation behaviour, such as age, gender, or education

#### Demography

In this chapter, we compare the results of the questionnaire with statistical data at the district level, if these are available through the kadaster<sup>1</sup>. If district-level data is not available, we use city-level data.

#### Age

The first demographical indicator we compared for representativeness is age. CBS data were available for the Stadsveld district. However, the age groups of the CBS data differ from the age groups used in the survey. Table 1 shows the difference and the age brackets we compared. The Stadsveld district has a relatively young population. The results of the survey partly reflect this. However, young adults (18-27 years) are underrepresented in our sample. An explanation for this is that the survey was primarily aimed at homeowners. In general, young adults do not yet own their own home. At the same time, we see an overrepresentation of the age group 28-47 years (42% of respondents). From the age of 45, the results of the survey more or less correspond to the age distribution of the Stadsveld district. We will consider this in our analyses, and if necessary weight the first two age categories.

Table 1: Overview of Age data from CBS for Stadsveld and Survey Respondents

CBS Data Stadsveld (> 15 years)		Age survey respondents	
15 - 25 years	19,5 %	18 - 27 years	9%
25 - 45 years	32 %	28 - 47 years	42%
45 - 65 years	30 %	48 - 67 years	33%
65 plus	18 %	67 - 87 years	16%

#### Gender

47% of the respondents were male and 53% female. Nobody identified as something else. We found no data on the male/female ratio in Stadsveld. However, at city level, the male/female ratio is 51% to 49%. Assuming that this distribution is representative of the district, female respondents are slightly overrepresented in our sample.

#### Level of Education

In the absence of district-level data, we compared the results of the survey to city-level CBS data. Our categories for education level do not correspond exactly with CBS data categories. To keep answering options as intuitive and easy to understand as possible, we used the following categories: secondary

<sup>1</sup> <https://kadastralekaart.com/wijken/wijk-02-boswinkel---stadsveld-WK015302>.

education; vocational education (MBO); and University of Applied Sciences (HBO) or higher education. The CBS category “low” education also includes the lowest level of vocational education (MBO-1) and puts persons who completed the highest levels of secondary education in the “middle” category. This may affect the comparison since in our survey half of the respondents completed vocational education (MBO) as their highest level of education. This is a slight overrepresentation compared to 42.6% at the city-level. 42% of the respondents indicated university education, meaning this group is overrepresented by 12.4%. 8% of respondents indicated secondary education, showing this group is underrepresented by almost 20%. Possible explanations for this are: (1) homeowners might have a higher level of education on average; or (2) people with a higher level of education are more likely to participate in a survey.

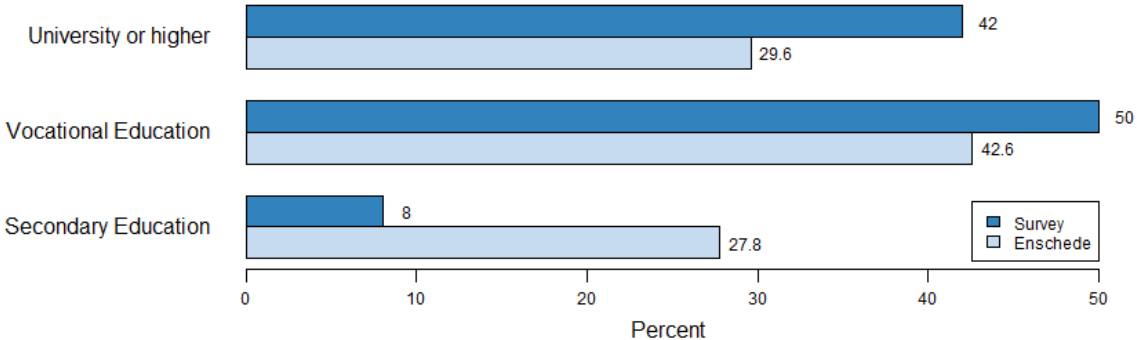


Figure 6: What is the highest level of education you have completed?

**Household Size and Composition**

54% of the respondents live in a two-person household without children. This is a strong overrepresentation (26% is average for the district). The opposite is true for single-person households: 26% of respondents live alone, while the district average is 45%. A possible explanation is that single-person households more often live in flats. The underrepresentation of households with children (19% in the sample compared to 29% in the district) may be due to the specific area within the district that was chosen for the survey.

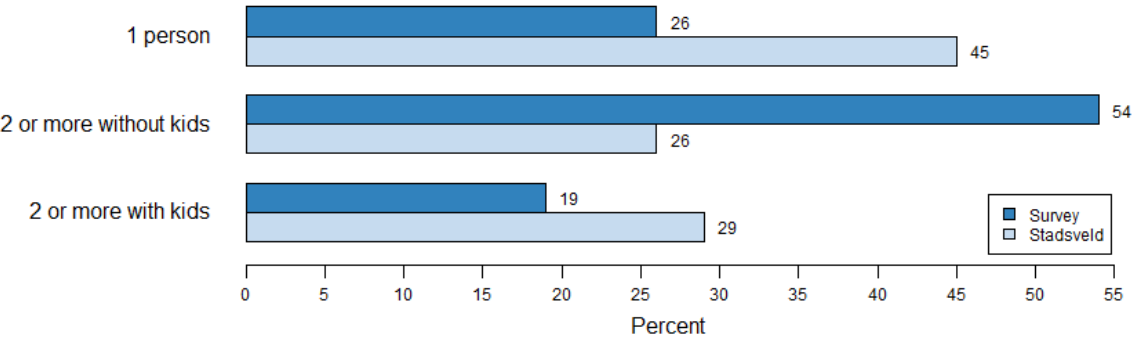


Figure 7: How many adults live in your home? Is someone in your home dependent on your care? (Multiple responses possible)

**House Type**

Homeowners are strongly overrepresented in the survey: 90% of the respondents own their house compared to 45% in the district. As indicated earlier, this was intentional since one main aspect of the survey was to investigate the implementation of measures on private property and the implementation of some measures requires homeownership, such as decoupling a rainwater pipe. Tenants will generally be less inclined to plant trees or set up a rain barrel, even if they have access

to a garden. We also asked what kind of house or flat respondents lived in. 75% chose "semi-detached or corner house" and 24% chose "townhouse or terraced house". Only two respondents lived in a flat and no one lived in a detached house. This corresponds with the low number of detached houses in the district. Another question inquired about the level of maintenance of the house. 66% of respondents indicated that the house was "well" maintained. Only two people responded that the maintenance and condition of the home was "poor".

Table 2: Overview of house types and ownership status

Rent versus private ownership (number of respondents)		House type (number of respondents)	
Private ownership	79	Semi-detached or corner house	65
Rent	8	Townhouse or terraced house	20
Else	1	Apartment	2
		Else	1

**Move-in Date and Future Plans**

To ensure respondents had enough time to implement measures in their current house, we asked when they had moved in. Only 5 respondents (6%) had moved in in 2020 or more recent. 36 (41%) had moved in between 2010 and 2019. 15 (17%) moved in during the first decade of this century and 32 (36%) have lived there for more than 2 decades. Staying in the same house and the same neighbourhood for a long time can also be an indicator of place attachment. Part 3 contains further questions about place attachment.

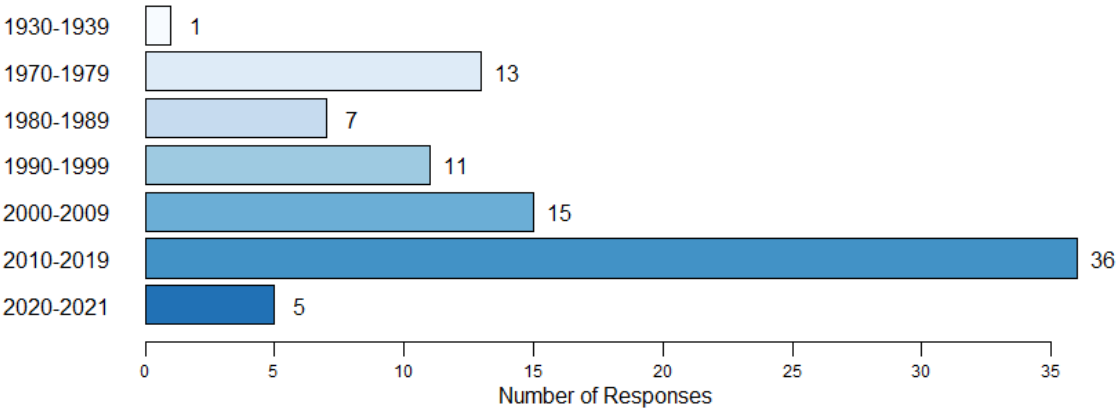


Figure 8: Since when are you living in your home?

In addition to the move-in date, the survey asked about plans to move out, or to stay in the house. The logic behind this question was that respondents who plan to move soon are less inclined to invest in measures. Especially measures that are more expensive and have a longer payback time, such as green roofs. About a quarter of respondents have not made plans. Only 7% plan to stay for less than a year and 19% plan to stay for 1 to 5 years. Half of the respondents plan to stay in their current house for at least another 5 years.

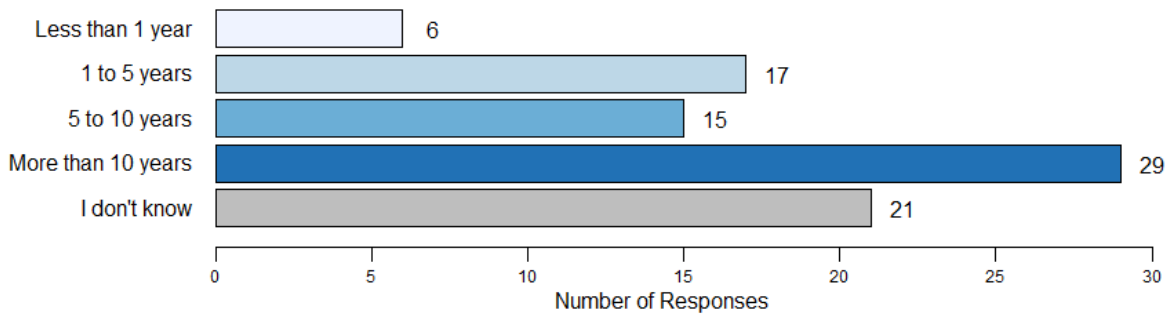


Figure 9: How long do you think you are going to live in your current house?

### Attitude towards Taking Risks and Responsibilities

#### Risk-taking

Respondents generally appear to be reasonably cautious. Most respondents (69%) replied that they rarely take risks. 18% said they never take risks. Only 11% responded that they regularly take risks and only 1 respondent said they often take risks.

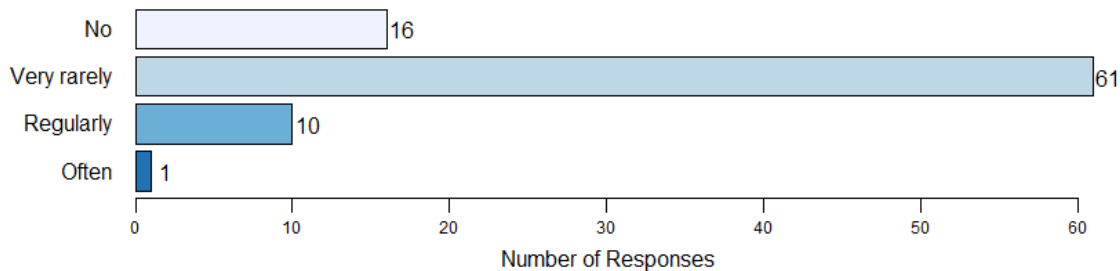


Figure 10: Do you take risks in your life?

#### Personal Responsibility

Respondents were asked about their perception of responsibility around preventing damage from water nuisance. They could select multiple responses from five statements. 15 respondents chose more than one answer and of these 15, 14 chose two or three answers. Only 12 respondents (13%) indicated that flooding is the responsibility of the municipality alone. Almost half believed that it is their own responsibility in addition to what the municipality already does. 23 respondents (26%) believed it is their own responsibility regardless of what others do or what it would cost them.

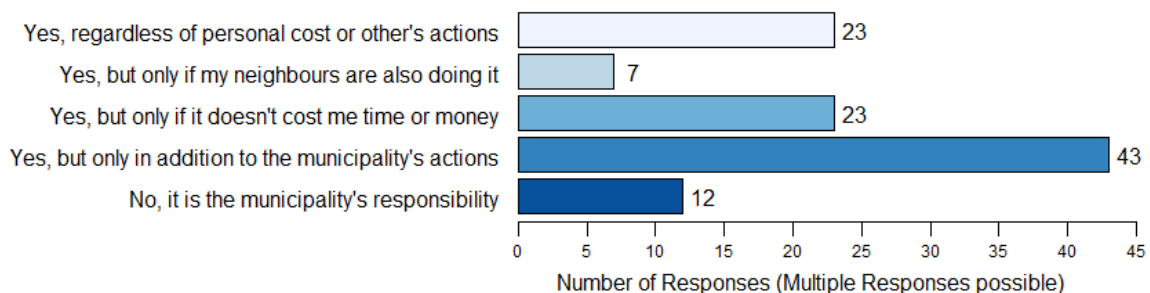


Figure 11: To prevent water nuisance, citizens or the municipality can take measures. Are you willing to take measures to prevent water nuisance? (Multiple responses possible)

### Conclusion – Representativeness of the Survey Sample

Due to the strong overrepresentation of homeowners in our survey, it is less representative in certain aspects when compared to the statistical data on district- or city-level. This might contribute to the underrepresentation of young adults and respondents with a low level of education. Due to



the lack of district-level data in combination with homeowner data, we are not able to fully assess whether our sample is representative. We also expect a more general problem: certain groups of residents are more inclined to answer a survey than others. Providing some form of monetary compensation, either as direct payment or in the form of a lottery of vouchers, could incentivise these groups to participate. However, due to time and resource constraints, this was not viable. The respondents are probably more engaged with public life than the general population of the district.

### 4. Survey Part 2: The Stadsbeek Project

In this part of the survey, we asked respondents about the Stadsbeek project and the public participation activities the municipality has undertaken.

#### Risk Perception of the Stadsbeek Project Measures

The first question in this section enquired about the risk perception of residents in relation to the implementation of the Stadsbeek (the Stadsbeek itself, the water storage and water infiltration, and drainage pipes). About half of the respondents (53%) answered that they do not know whether the measures are sufficient to prevent future water nuisance. Of those who did have an opinion, only 3 thought that the measures were insufficient to prevent water nuisance. 21 (24%) indicated that it is enough for the next 30+ years and 17 (19%) indicated that it is currently enough but that more measures are needed within 10 years.

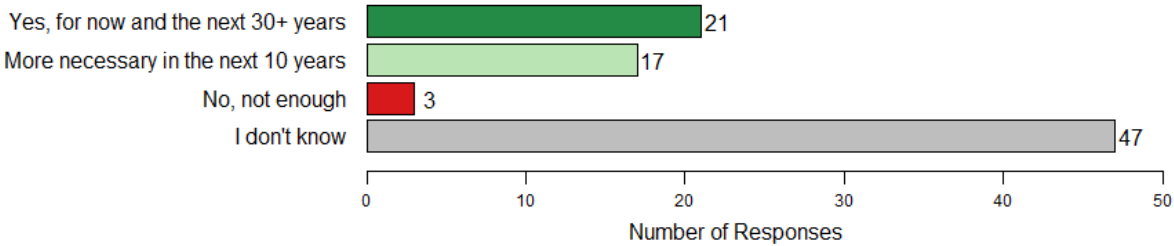


Figure 12: “In the Stadsbeek project a brook, water storage, infiltration and drainage pipes were constructed to reduce nuisance due to extreme rain or high groundwater. Is this project sufficient to prevent water nuisance?”

#### Involvement in the Project

We asked residents which of the participation activities they utilized (several options were possible). The activity that stands out is the newsletter: 76 respondents (86%) indicated that they had read the newsletter. Only 10 people in our sample indicated that they had not participated in anything. Half of the respondents who had read the newsletter participated in at least one of the other activities. The other half only read the newsletter. The small-scale design sessions (construction of Stadsbeek, Rembrandtlaan or Pinkeltjesplein) were attended by 9 respondents. 13 people used the website groenblauwenschede.nl, and 20 had contact with the neighbourhood concierge. 31% of respondents used the Bouw-App. Only 2 respondents were involved in one of the activities without having read the newsletter. One of them used the app and the other participated in an information meeting. In other words: the newsletter was not only popular, but most likely also a very useful tool to inform residents about other participation activities.

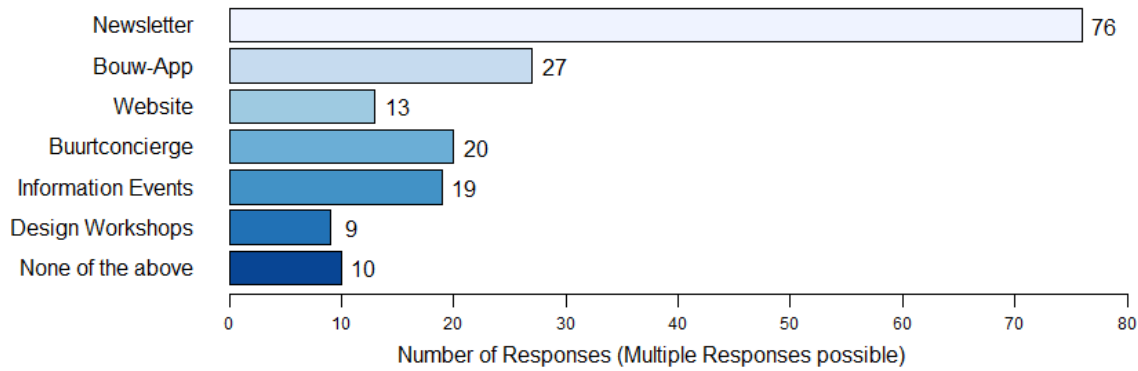


Figure 13: Which of the following is applicable to you?

### The Neighbourhood Concierge

The 20 respondents who had had contact with the neighbourhood concierge were asked to indicate whether this had led to any changes in terms of:

- Knowledge: I know better than before what I could do myself;
- Motivation: I am more motivated than before to do something myself;
- Self-efficacy: I feel more confident than before that I can do something myself;
- Collective efficacy: I feel more confident than before that we as a community can do something;
- Government care: I feel more like the municipality is paying attention to my concerns than I did before.

The results show that the neighbourhood concierge significantly improved one of these aspects: the feeling that the municipality pays attention to the concerns of residents. 14 of the 20 people who spoke with the neighbourhood concierge agreed with this. Given the relatively small sample size (20 people), no general conclusions can be drawn from this. Nevertheless, it is still a striking result.

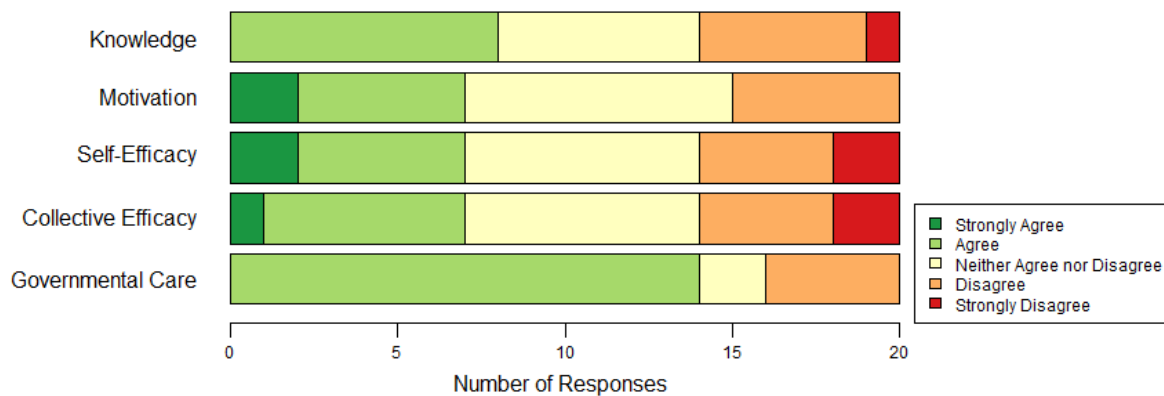


Figure 14: Does your contact with the neighbourhood concierge influence your view on water nuisance?

Regardless of whether respondents had used a participation activity or not, we asked them for their opinion on the usefulness of the activity. Below, we present the results for all respondents as well as for those who participated. This shows that the people who did not participate in any of the activities often did not have an opinion about the usefulness of the activities. Most activities were assessed positively ("very useful" or "a little useful"). This is especially true for the newsletter. Only 3 people indicated that they did not find the newsletter useful. The Bouw-App was the most used tool after

the newsletter and it was also rated well. All users of the app found it "very useful" or "somewhat useful".

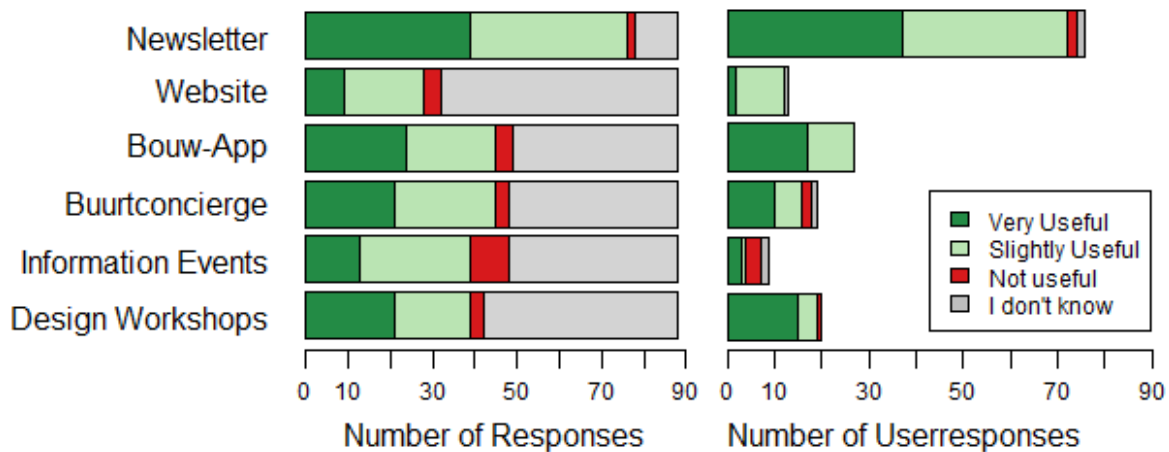


Figure 15: Overview of answers of all respondents (left) and of users of the option (right) for the question "How useful do you find the following activities of the Stadsbeek project? (It does not matter if you participated in the activity yourself)"

As with the neighbourhood concierge, we asked about the effect of the Stadsbeek project participation activities as a whole on the improvement of the following factors:

- Knowledge: I know better than before what I could do myself;
- Motivation: I am more motivated than before to do something myself;
- Self-efficacy: I feel more confident than before that I can do something myself;
- Collective efficacy: I feel more confident than before that we as a community can do something;
- Government care: I feel more like the municipality is paying attention to my concerns than I did before.

As with the neighbourhood concierge, government care was the most improved factor. The other factor that improved was collective efficacy: 34 out of 80 respondents responded with "totally agree" or "somewhat agree".

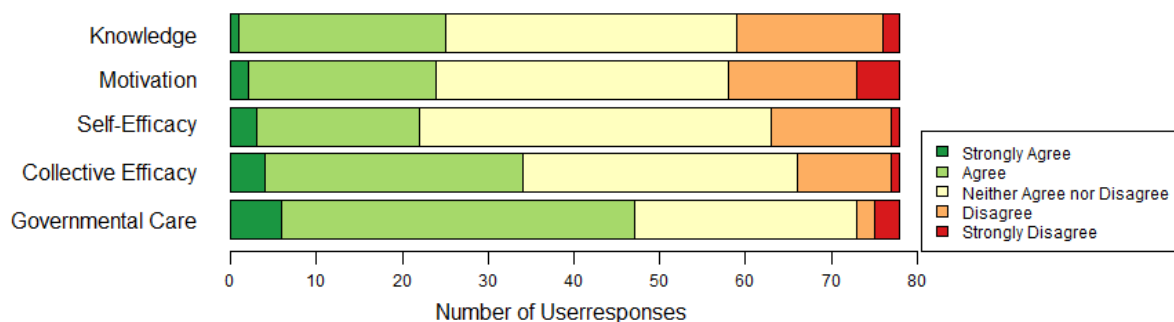


Figure 16: Did your view on water nuisance change because of the participation activities of the Stadsbeek project?

### Conclusion on Participation Activities

Respondents generally appreciate the participation activities. The newsletter in particular stands out: it was widely read and was seen as useful by almost all residents. Moreover, most people who read the newsletter also participated in at least one other activity. People who did not read the newsletter generally did not take part in other activities. It seems that the newsletter was a useful tool to spread information about other participation activities. The Bouw-App was also used frequently, especially

considering that it was only utilized in the last phase of the project. All respondents who used the app rated it as at least somewhat useful.

## 5. Survey Part 3: Contacts in the Neighbourhood

This part of the survey focusses on social connections as a proxy for social norms. These can have an impact on respondents' implementation of measures to prevent water nuisance on their own property.

First, we asked respondents if they are active in an association or club in the neighbourhood (such as a sports club, church or book club). Only 19 respondents answered yes to this question. The vast majority are not actively involved in an association or club in their own neighbourhood.

Respondents were also asked with how many households they were in contact. All but one respondent had contact with at least one other household in their neighbourhood, and more than one-third had contact with five or more households in their own neighbourhood.

Next, we asked about the type of contact between households. As the figure below shows, most contact can be considered superficial: people greet each other or engage in small talk. A large part of the respondents also indicated that they pay attention to each other's houses and properties.

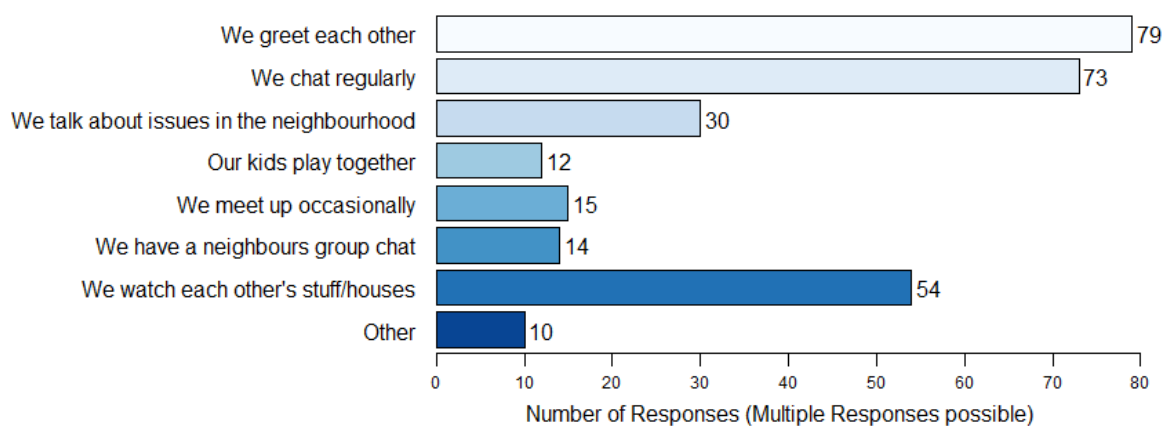


Figure 17: How would you describe your contact with your neighbours? (Multiple answers possible)

The last question enquired about factors that may influence respondents' adaptation behaviour, such as place attachment, injunctive social norms (what should be) and descriptive social norms (observations of other people's behaviour). As with earlier questions, respondents could rate the statements on a scale from "totally agree" to "totally disagree".

- Place attachment: I feel at home in this neighbourhood;
- Negative place attachment: I would rather live in another part of Enschede;
- Social cohesion: I have a good relationship with my neighbours;
- Injunctive norms: I find the appearance of my house or garden important;
- Descriptive norms: I notice when my neighbours change or renovate their house or garden.

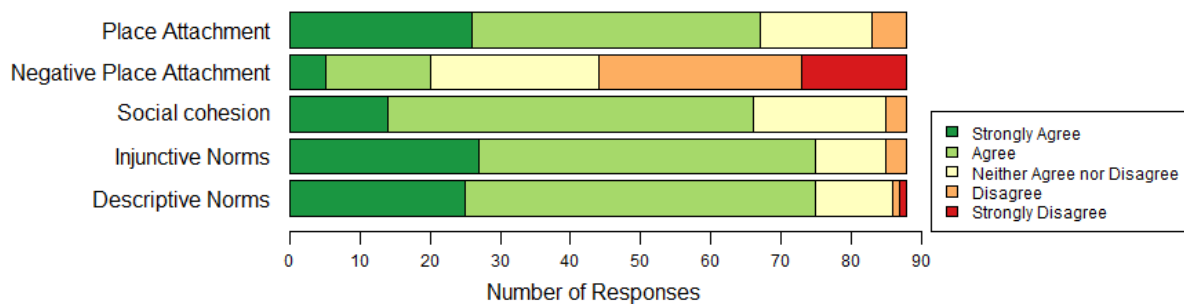


Figure 18: Do you agree with the following statements? (Statements shortened for figure, see Annex 3 – Survey [Dutch])

Most respondents agreed or completely agreed with the statements, except for the statement about negative place attachment. This statement expressed a desire to leave the neighbourhood, thus respondents with high place attachment would disagree. Respondents paying attention to their neighbours' behaviour (i.e. descriptive norms) is in line with the earlier observation that respondents pay attention to each other's houses and possessions.

### Conclusion about Contacts in the Neighbourhood

In general, respondents have frequent contacts with their neighbours, many residents are attached to their neighbourhood and they find the appearance of their own home and that of their neighbours important. The group of respondents shows little variability. Hardly anyone indicated that they had few contacts in the neighbourhood or did not value the opinions of neighbours. This makes it difficult to draw conclusions about the role of social norms, since there is no control group. What may play a role is that residents who are willing to answer a survey of this nature are also more interested and more embedded in the neighbourhood.

## 6. Survey Part 4: Experiences of Water Nuisance

Part 4 of the survey enquired about previous experiences with, and damage caused by water nuisance. It also asked about the changes in perceived risk from and worry about water nuisance.

### Experiences of Water Nuisance

The majority of respondents have experience with water nuisance. Only 28% said that they had no experience of water nuisance at all. 43% had experiences with water nuisance and resulting personal damage. A number of the respondents had experienced water nuisance, but without personal damage. 14 respondents (16%) experienced health problems, but the majority (11 out of 15) only experienced mild symptoms for a short period. Only 2 people experienced mild symptoms over a longer period and 1 person experienced severe symptoms for a short period of time. A number of respondents gave inconsistent answers to this question: 5 of the 15 respondents stated that they experienced health complaints without any damage to their homes. 1 had never experienced any water nuisance but had suffered damage. 4 respondents had experienced water nuisance without damage, but later indicated that they had suffered damage.

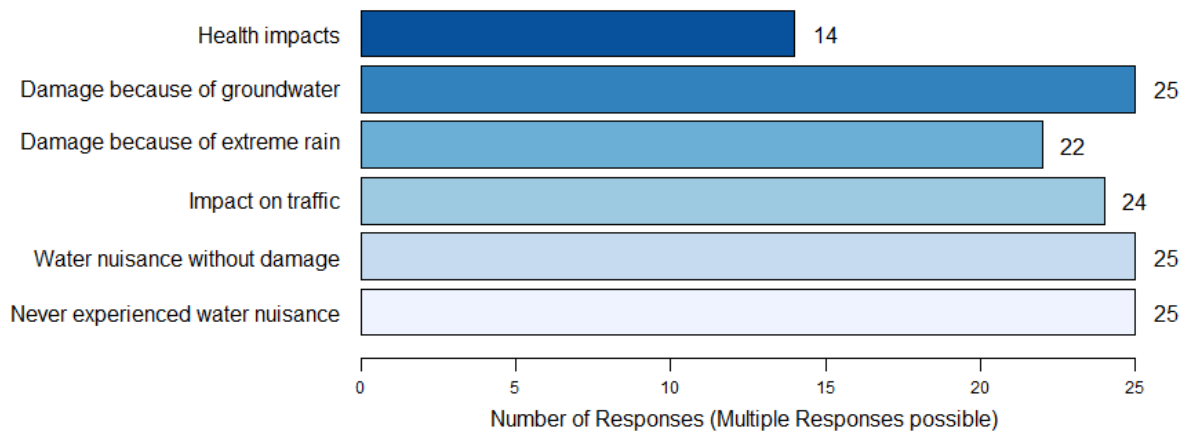


Figure 19: Did you ever experience water nuisance in conjunction with one of the following? (Multiple answers possible)

### Last Year of Water Nuisance

The 44 respondents who indicated that they had experienced water nuisance and had suffered some form of damage were asked in which year they had **last** experienced water nuisance (open question). 2015 was the most frequent answer (7 times), followed by 2018, 2019 and 2021 (6 times each). Only 3 respondents indicated that their last experience of water nuisance was in 2010 or 11, the years Enschede experienced very heavy water nuisance due to extreme rain events.

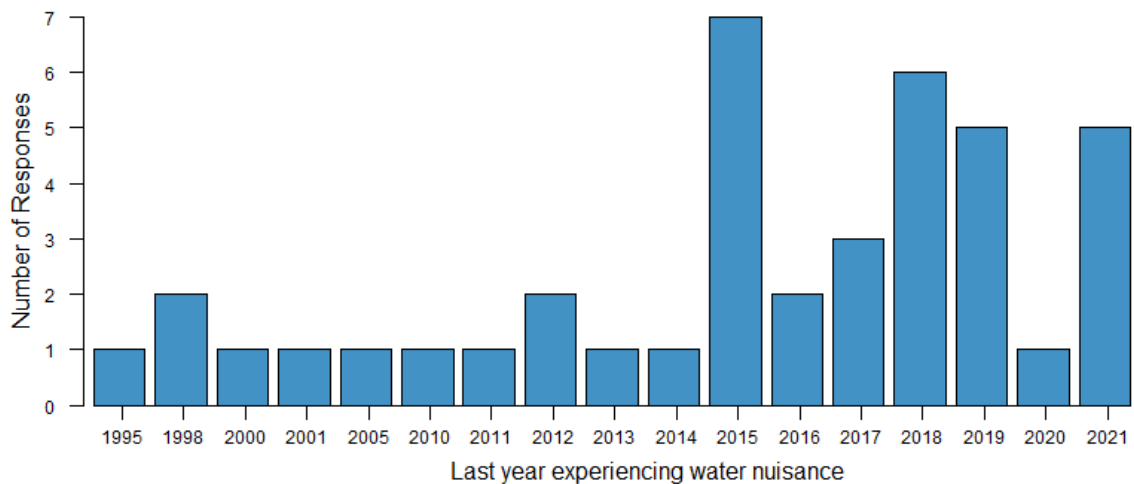


Figure 20: When did you last experience water nuisance? (Open question)

### Financial Damage Caused by Water Nuisance

Respondents who reported damage to their house or garden were then asked about the height of the financial damage. Half of these respondents reported a 100 euros or less in damages. 45% reported between 500 and 5000 euros of financial damage. Only 3 people reported damage of more than 5000 euros.



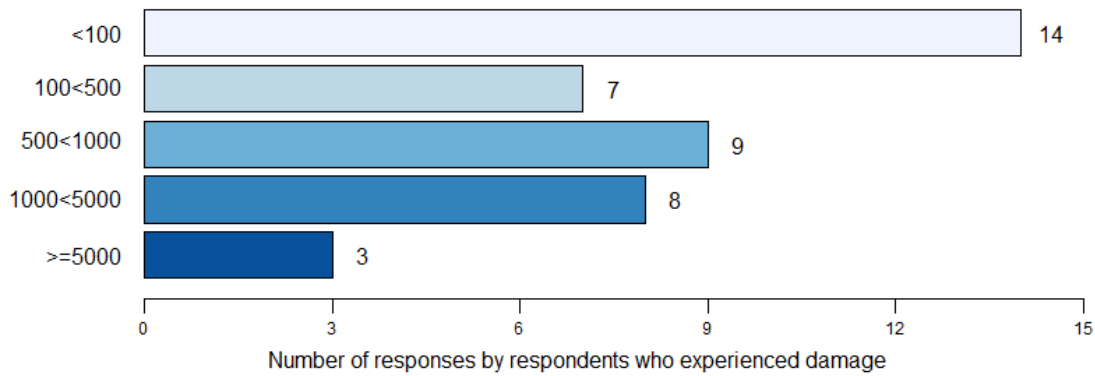


Figure 21: How much financial damage did the last experienced water nuisance event cause in your estimation? In euro.

### Current and Future Risk Perception

When asked about expectations of water nuisance, more than half of the respondents perceive little or no risk to their properties from water nuisance. Only 13% expect water nuisance at least once a year.

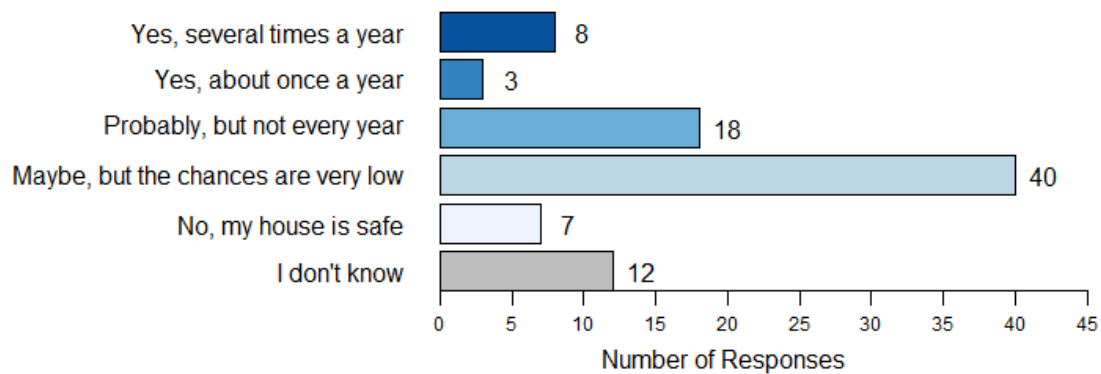


Figure 22: Do you expect water nuisance on your property in the future? (E.g. caused by heavy rainfall, storm or a high groundwater level)

Next, we asked about perceived increases or decreases to the risk of water nuisance in the future. 36% indicated that they do not know, while 33 of the respondents (more than one-third) indicated that they expect water nuisance to decrease in the next 10 years. Only 18% expect an in the near future.

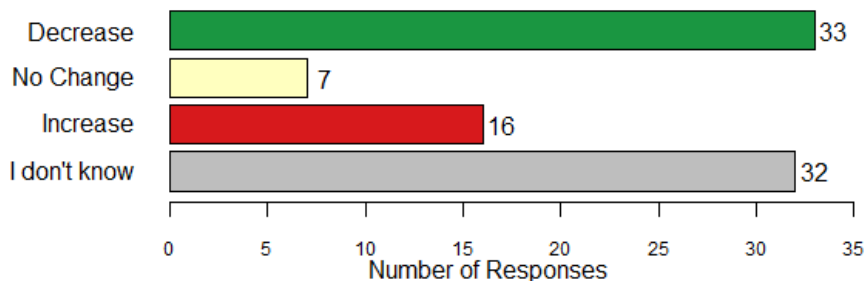


Figure 23: Do you think that water nuisance changes in the upcoming 10 years?

Worry about damage can influence the motivation of respondents to implement measures. Therefore, we also asked respondents whether they were concerned about the possible consequences of water nuisance. Although about one-third are not concerned, 59% are. This is

striking since most respondents think that there is only a small chance of water nuisance on their property.

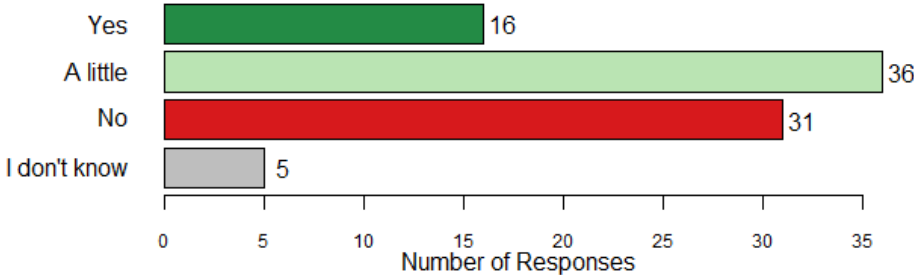


Figure 24: Are you worried about the possible effects water nuisance have on your home?

The last question in this section enquired after respondents' perception of the health impacts of water nuisance. About one-third of respondents were unsure and 18% did not know. This seems to indicate that respondents are uncertain about the possible health effects of water nuisance.

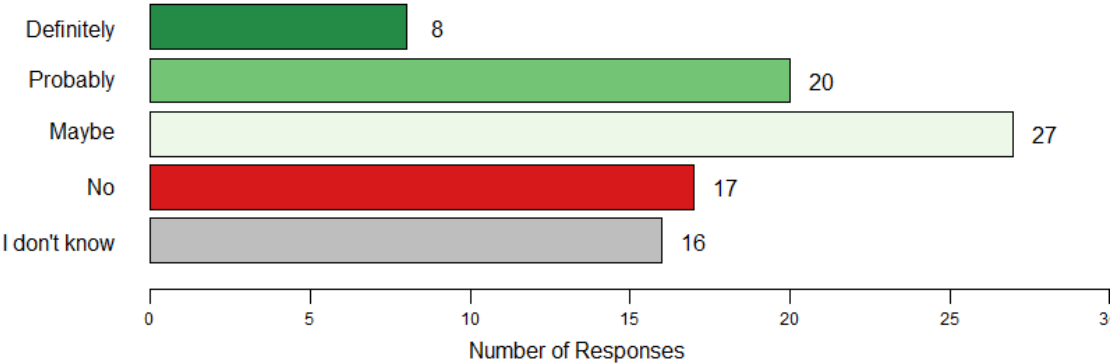


Figure 25: If you experience water nuisance in the neighbourhood, will this have negative effects for you health or that of the persons you live with?

**Conclusions about Risk Perception**

Quite a few respondents experienced water nuisance and also experienced damage as a result. However, this damage was generally limited. Respondents expect the risk of damage in the future to be small, but are predominantly at least slightly worried. The graph below shows that most respondents who are not, or only slightly, worried have not experienced any damage before. Many respondents who have experienced damage are concerned or slightly concerned.

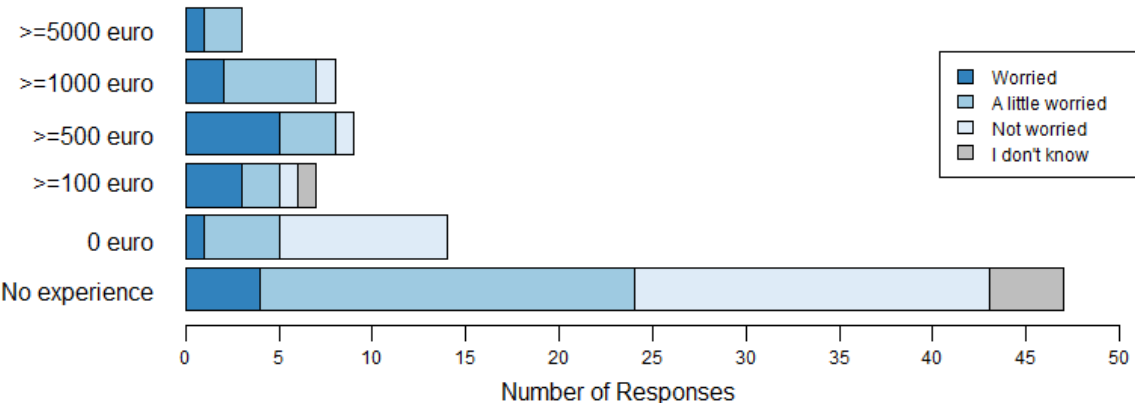


Figure 26: Relationship between financial damage from water nuisance experience and worry.

## 7. Survey Part 5: Measures to Prevent Water Nuisance

The last part of the survey covered 5 specific adaptation measures and respondents' knowledge about, attitude towards, and implementation of those measures. Questions covered these measures:

1. Decoupling rainwater pipes
2. Taking out pavement and greening gardens
3. Setting up rain barrels
4. Planting trees
5. Installing green roofs

The first questions enquired how much respondents knew about decoupling, taking out pavement and installing green roofs. They were not asked whether they were familiar with planting trees or setting up a rain barrel because we assumed that these measures are widely known. Respondents were only asked further questions about a measure, if they answered that they were at least somewhat familiar with it. Most respondents were at least somewhat familiar with the measures. The green roof was the least known measure; 42% of the respondents indicated that they were not familiar with it.

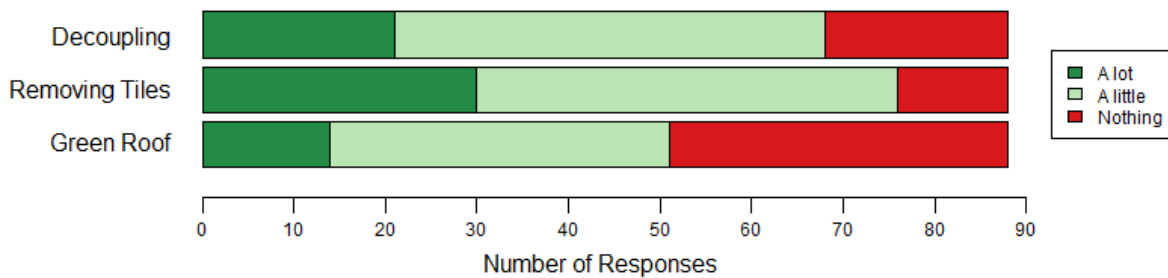


Figure 27: How much do you know about [...]?

Respondents were then asked how they had heard about these three measures. With regard to decoupling, most respondents (76%) had heard about the measures via the Stadsbeek project or the neighbourhood concierge. Sometimes in addition to other communication channels such as friends, family or the media. For the removal of pavement, 14% had heard about it via the municipality or the neighbourhood concierge and 55% via the media. The participation of the municipality of Enschede in the NK Tegelwippen (EN: National pavement removal contest) (March-October 2021) during the time the survey was running might have contributed to its presence in the media. With regard to the green roof, 68% had heard about it in the media and none had received information from the municipality.

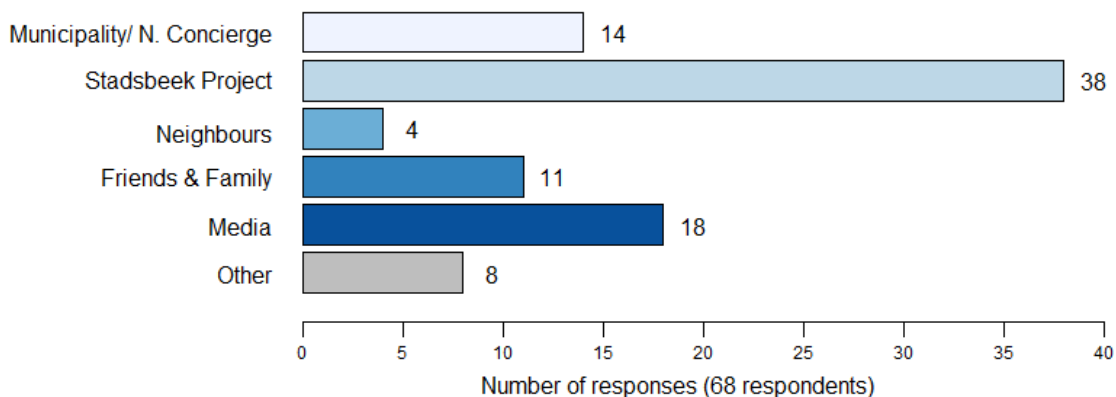


Figure 28: How did you hear about decoupling of your rain water pipe? Via...

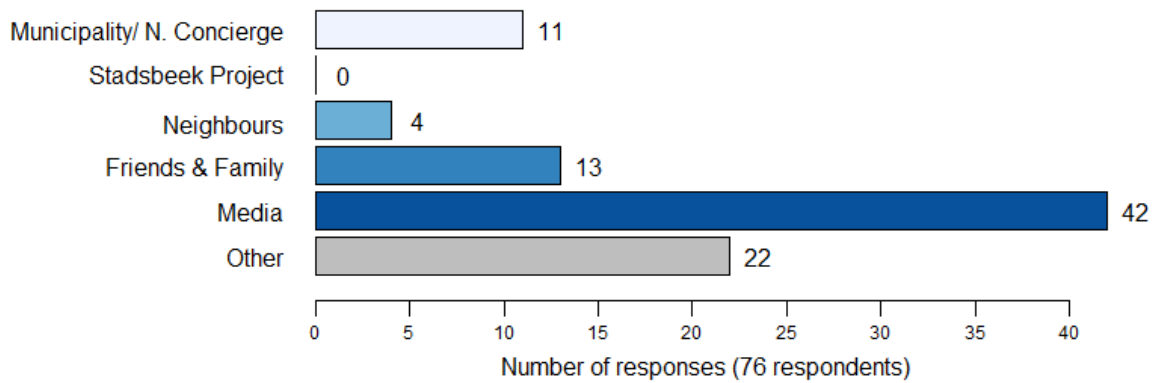


Figure 29: How did you hear about removing the pavement? Via...

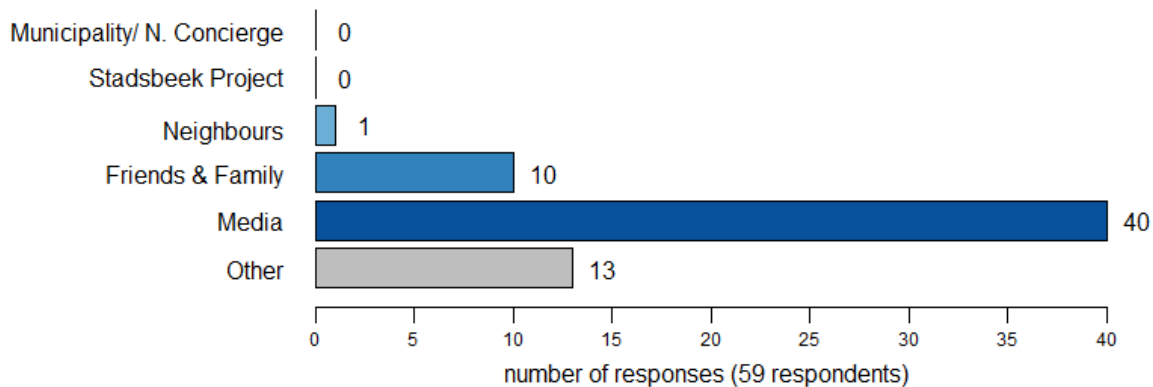


Figure 30: How did you hear about installing a green roof? Via...

### Effectiveness of Measures

We asked the respondents whether they thought the measures were effective in preventing water nuisance. For the removal of pavement and the planting of trees, 80% of the respondents said they thought the measure was effective. For the green roof, 70% agreed with the statement that the measure is effective. For decoupling, 50% agreed with the statement and 28% were neutral. Regarding the effectiveness of the rain barrel, only 42% agreed with the statement and 23% disagreed. Decoupling and setting up a rain barrel are seen as ineffective more often than other measures.

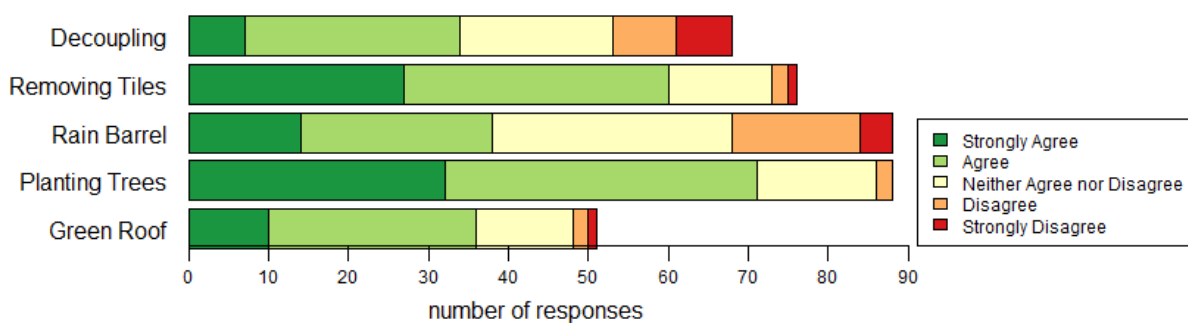


Figure 31: Do you agree with these statements? I think this [measure] helps to prevent water nuisance.

### Capacity to Implement Measures

The next set of questions geared towards respondent's ability to implement measures themselves. Only house owners were asked about this, because tenants cannot just implement measures without the landlord's permission. About half of the respondents said they had enough resources to set up a

rain barrel, remove pavement or plant a tree. This dropped to 33 respondents for decoupling; this is still about half of the respondents who were asked this question. Only 11 respondents, 22% of those asked this question, said they had the capacity to implement a green roof.

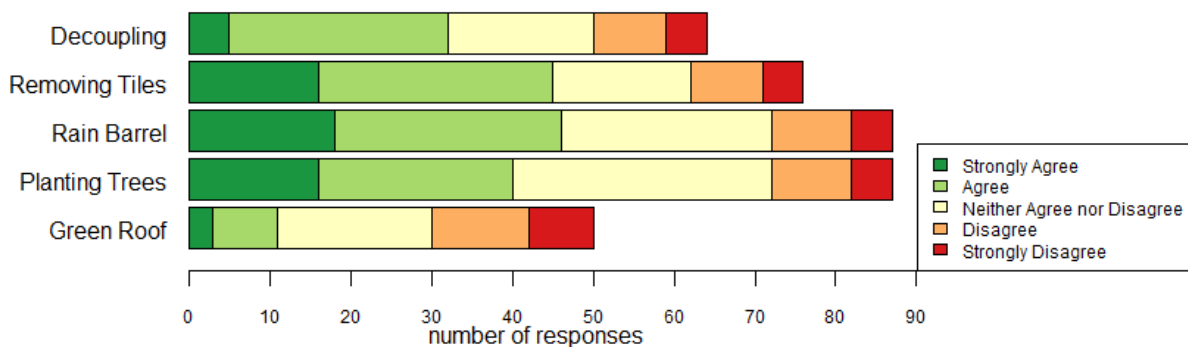


Figure 32: Do you agree with these statements? I have the means to implement this [measure].

### Cost of Measures

As indicated above, the majority of respondents did not think they had the capacity to implement a green roof. This might be related to the costs of this particular measure. Of the 52 respondents, 40 (75%) agreed with the statement that this measure is expensive. No one thought it was cheap. The reverse is true for decoupling. Only 7 of the 64 respondents thought this was an expensive measure. However, the municipality offered to implement this measure in some parts of the area with no cost to the house owners. 81% of the residents in the Elferinksweg and the 2e Emmastraat made use of this offer. There are 16 respondents in these streets, 10 of which indicated that they decoupled their rainwater pipes. This explains why many of the respondents (34 out of 68) said it was a cheap measure. Only a small part of the respondents thought removing pavement or setting up a rain barrel was expensive, while between 12% and 20% indicated it was cheap. When it came to planting trees, 43% were neutral related to the costs, while 39% perceived it as an expensive measure. While this is similar to the number of respondents perceiving green roofs as expensive, 14 respondents strongly agreed for the green roof, whereas only 3 strongly agreed for planting trees. We conclude that respondents may not consider planting trees as cheap, but they do not consider it to be as expensive as installing a green roof.

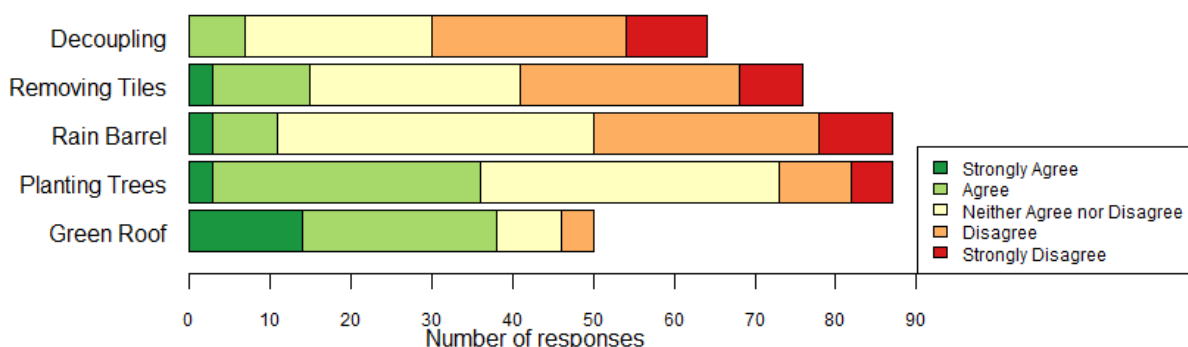


Figure 33: Do you agree with these statements? I think that [measure] is relatively expensive.

### (Planned) Implementation of Measures

The next set of questions focussed on respondents' implementation of measures, or their intention to do so in the future. For the removal of pavement, setting up a rain barrel and the planting of trees, the respondents could indicate that they had already done so and that they are intending to do so, whereas they could not choose multiple responses for decoupling and green roof installation. We

reasoned that planting one tree does not prevent someone from planting another in the future. However, once a rainwater pipe is decoupled, this cannot be repeated in the future. The same applies to the green roof.

For each measure, between 20 and 33 respondents answered that they had neither implemented the measure nor any intention of doing so. No respondents had implemented a green roof. However, about half of the respondents for this question indicated that they were planning to do so in the future. As for removing pavement or planting trees, more than half of the respondents said they had done this recently or years ago. About a quarter of the respondents had already set up a rain barrel and another third were planning to do so. Of the respondents who were asked about decoupling, 26 had already done so, 18 of them recently. Another 18 are planning to do so.

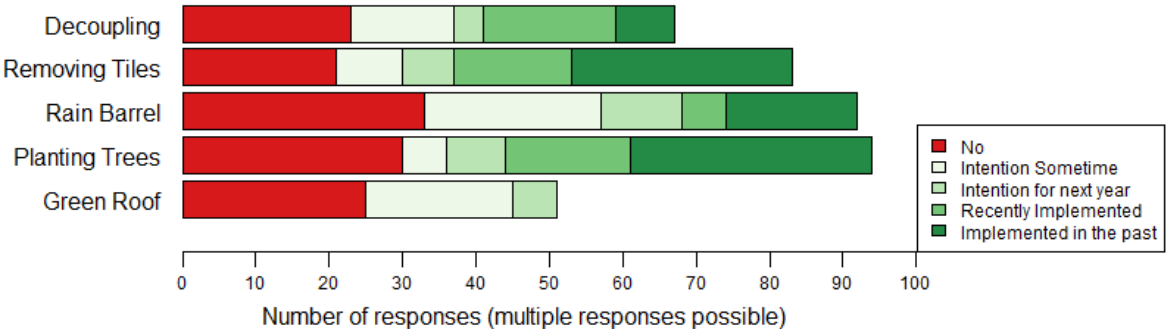


Figure 34: Did you implement this, or are you planning to?

**Motivation to Implement Measures**

Respondents who had implemented a measure or planned on doing so in the future, were asked why they had done so. Unfortunately, due to a mistake in programming we only have answers for the first three measures, namely decoupling, removal of pavement, and setting up the rain barrel. The question for each measure provided different motivations. Therefore, we are presenting the results by measure to avoid confusion.

**Motivation to Decouple the Rainwater Pipe**

26 respondents had decoupled their rainwater pipe at some point. The majority of respondents who had done this "years ago" (5 out of 8) did so to save water. This is relevant because this was not one of the answers in the survey. Respondents provided this in an open field independently of each other. Of the 18 who had recently decoupled their rainwater pipe, 9 selected that "the neighbourhood concierge had recommended it", while 10 chose "to prevent water nuisance".

18 respondents had indicated in the previous question that they would like to decouple their rainwater pipe in the future. A majority of the respondents (10 out of 14) who did not have concrete plans to do so, did not give a motivation, while all 4 respondents who want to decouple next year had a motivation. Two respondents wanted reduce water nuisance, another indicated that the neighbours had also done it and the last one said because it was free. Of the 4 people with vague plans to decouple who gave a motivation, 2 want to reduce water nuisance, 1 because friends or family had recommended it and 1 because it is free of charge. Social norms, like friends and family recommending the measures seem to play a minor role.



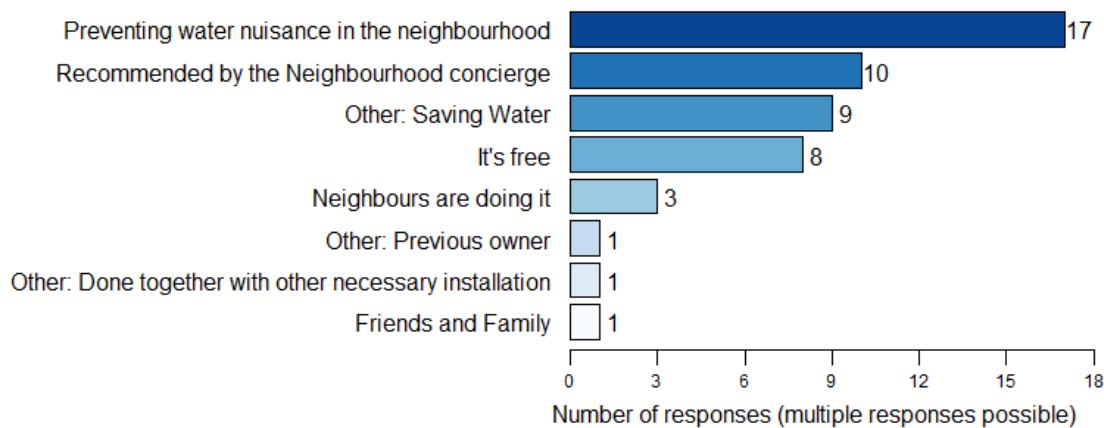


Figure 35: Why did you decouple your rainwater pipe? (Multiple answers possible)

### Motivation to Remove Pavement

44 respondents had removed pavement from their garden at some point. Almost all of them (40) did this because they wanted more green in their garden. About one-third of them also cited preventing water nuisance as a reason. Interestingly, the aesthetic aspect of greening was the second most cited reason. In addition, one respondent used the open field to add the reduction of heat stress in the summer.

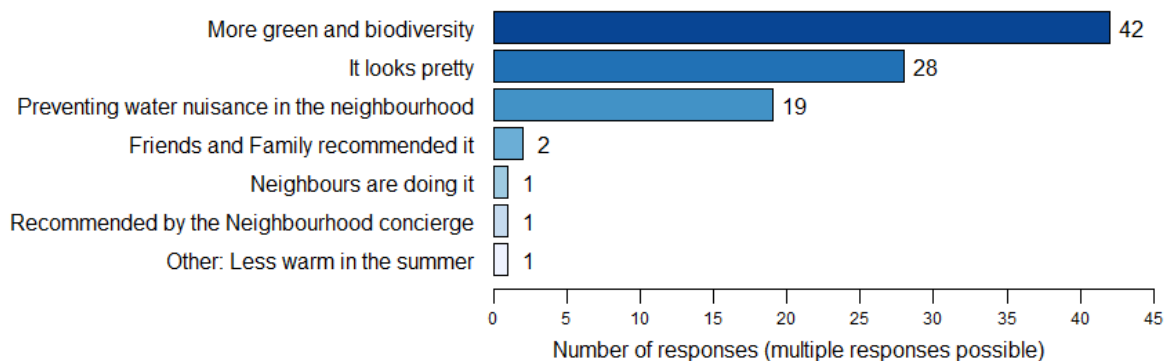


Figure 36: Why did you (partly) remove your pavement? (Multiple answers possible)

Of the 31 respondents who had removed pavement years ago, most said they had done so because of more green, biodiversity or because it looks nice. In contrast, of the 17 respondents who had recently implemented the measures, half stated "to prevent water nuisance" as the reason. This answer often occurred in addition to more green and biodiversity.

### Motivation for Setting up a Rain Barrel

The majority of respondents for this question (34 out of 55) want to save water. The responses for this measure show the smallest variance between respondents who have already implemented the measure and those who were planning to do so. "Saving water" was by far the most selected motivation for both groups. Most respondents (6 out of 8) who gave 'prevent water nuisance' as a reason, have not yet done so, but intend to do so in the coming year. In this measure, as in the other two, recommendations from friends and family and examples from neighbours did not play an important role.

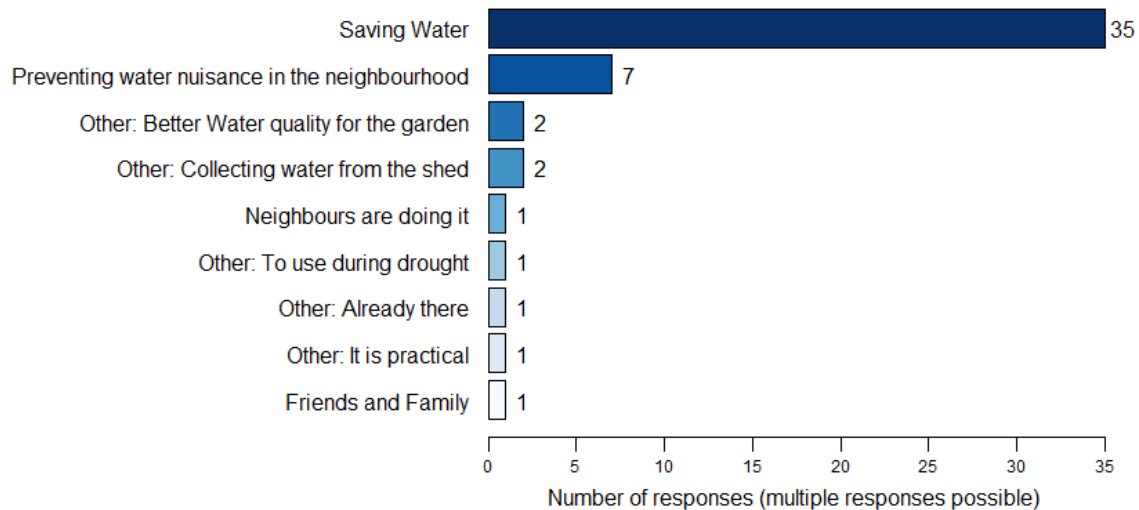


Figure 37: Why did you set up a rain barrel? (multiple answers possible)

### Additional Measures

We also asked respondents about taking other additional measures, including behaviour changes. These measures can limit damage, are usually inexpensive and relatively easy to implement. Almost two-thirds of the respondents indicated that they do not take additional measures, but some do. A number of them even indicated that they were implementing additional structural measures in their house, specifically in the basement, such as installing a pump (3 respondents), applying water resistant plaster (2 respondents), or tiling or raising the floor (2 respondents).

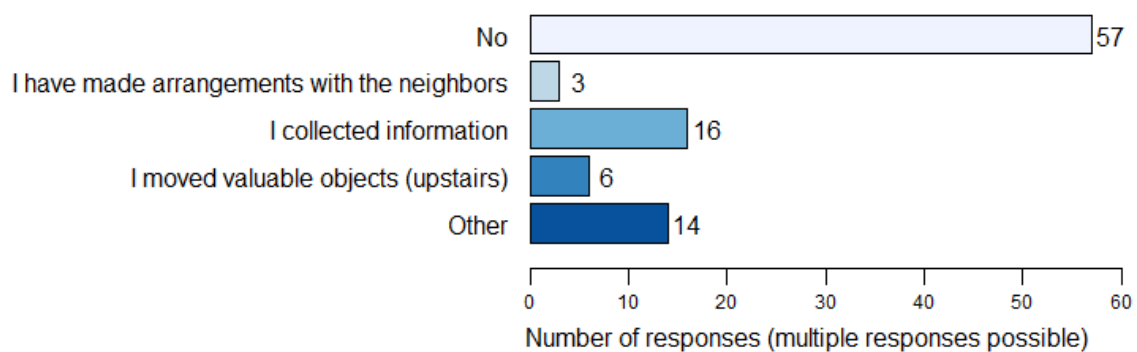


Figure 38: Did you do other things to prevent water nuisance? (Multiple answers possible)

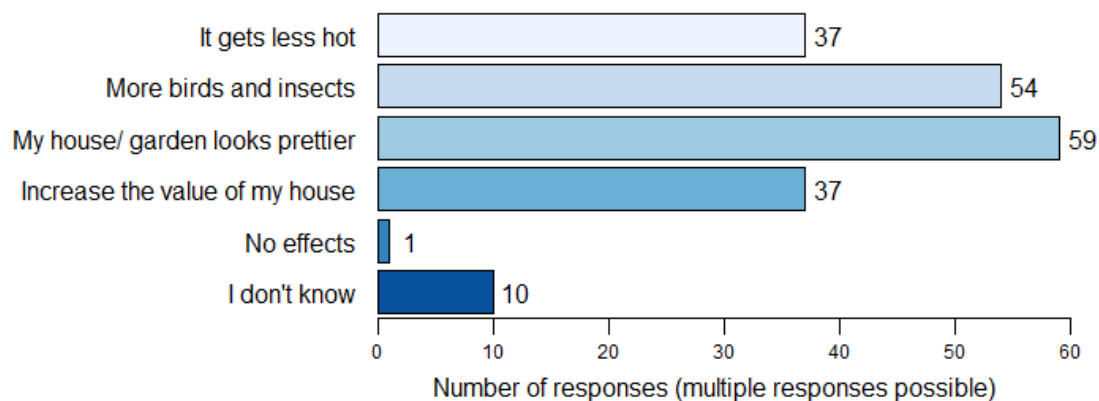


Figure 39: If you think about what you have done, or willing to do, which other effects does it have do you think? (Multiple answers possible)

### *Social Norms – the Influence of Friends, Family and Neighbours*

Respondents seemed to have difficulty answering the questions on social norms. Most respondents indicated that they did not know the expectations of others, or indicated that others had no expectations at all. Only 2 respondents indicated that others expected them to prepare for water nuisance.

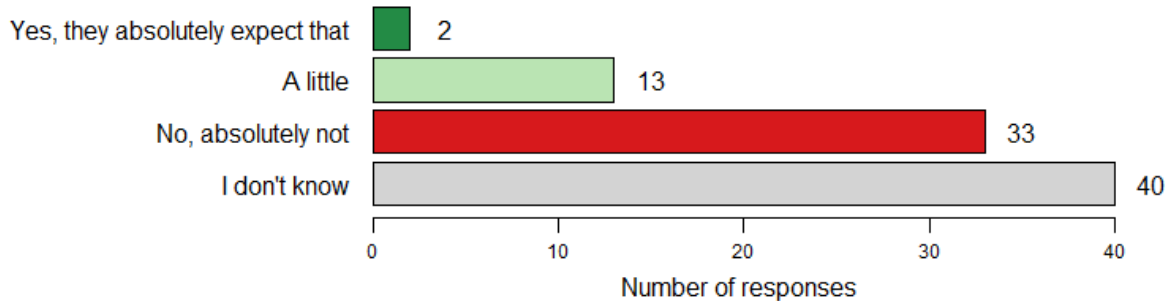


Figure 40: Do your friends, family or neighbours expect you to prepare to water nuisance?

Over half of the respondents do not know whether others are taking measures. A small group indicated that they did know that others were taking measures. 6 respondents even indicated that they knew a relatively large number of people who were taking measures.

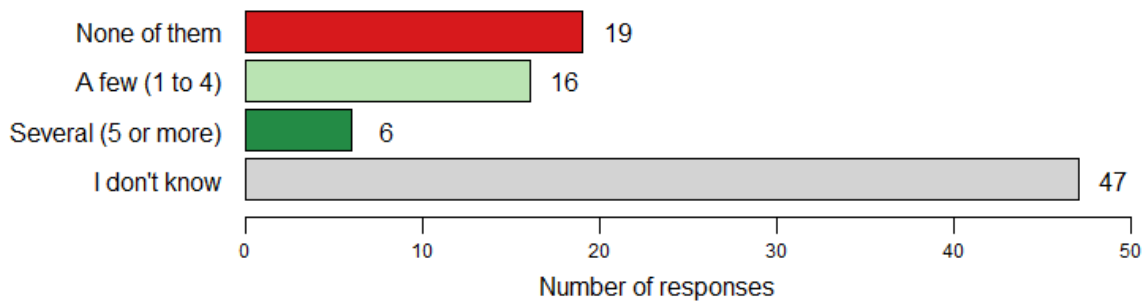


Figure 41: How much of your friends, family or neighbours took precautionary measures to prevent water nuisance?

### *Conclusions about the Implementation of Measures*

It is striking that the vast majority of respondents indicate that they have taken or intend to take measures. They do this for a variety of reasons. Water nuisance is one of the reasons, but often not the most cited one. More green, or aesthetics, are frequently mentioned as well. Green roofs are a relatively unknown measure. They are deemed expensive and have not been implemented, yet. The results show that the efforts of the municipality with regard to decoupling have had an effect. A relatively large number of people are familiar with it and most of those (75%) had heard about it either directly from the neighbourhood concierge, or via the municipality, or the Stadsbeek project. In contrast, none of the respondents had heard about green roofs via the municipality, but only through the media.

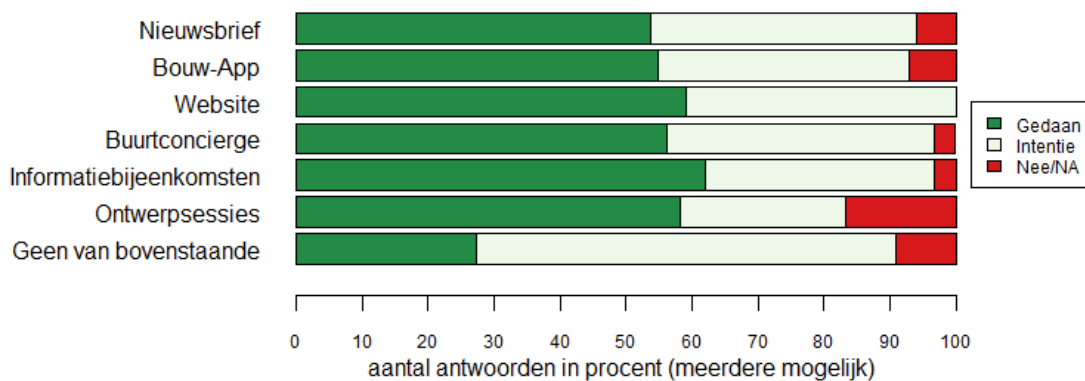
## 8. The Influence of Participation on the Implementation of Measures by Private Households

In this section, we discuss the possible influences of participation and other factors on the implementation of measures by private households. With regard to the influence of participation, we would like to point out that this is generally difficult to assess. The most effective way to determine the influence is to take a baseline measurement before any participation activities have occurred and compare them to another measurement taken after the participation activities. This was not possible in this case. However, we tried to account for this by distributing the survey in streets with access to more or less participation activities. This does allow us to check whether there is a relationship between the degree of participation and the degree of adaptation measures implemented. In this chapter, we will discuss our results, focusing specifically on the role of the website and the neighbourhood concierge. We also discuss the role of previous experience of water nuisance and age. For other factors from our theoretical framework, we found no relationship with the implementation of adaptation measures.

### *Does Participation have a Positive Effect on Implementing Measures?*

One obvious hypothesis is that **participation has a positive influence on the adoption of adaptation measures**. After all, if you receive, or seek, information about a measure or are involved with the subject in a design session, you will probably be more inclined to take a measure. Figure 42 below shows the extent to which respondents have taken, or intend to take measures per participation activity. This is a sum of implementation or intention across measures for each respondent in relation to each participation activity that respondent utilized.

The figure below and other analyses show that there is no simple relationship between participation and implementation. What the figure does show is that respondents who did not participate in any activity implemented less measures. As this group was fairly small in our sample we cannot draw any definitive conclusions. However, this could indicate that participation activities reach the residents that are already relatively more active.



**Figuur 44:** Overview of the relationship between taken measures (per respondent) and participation attendance (percentage).

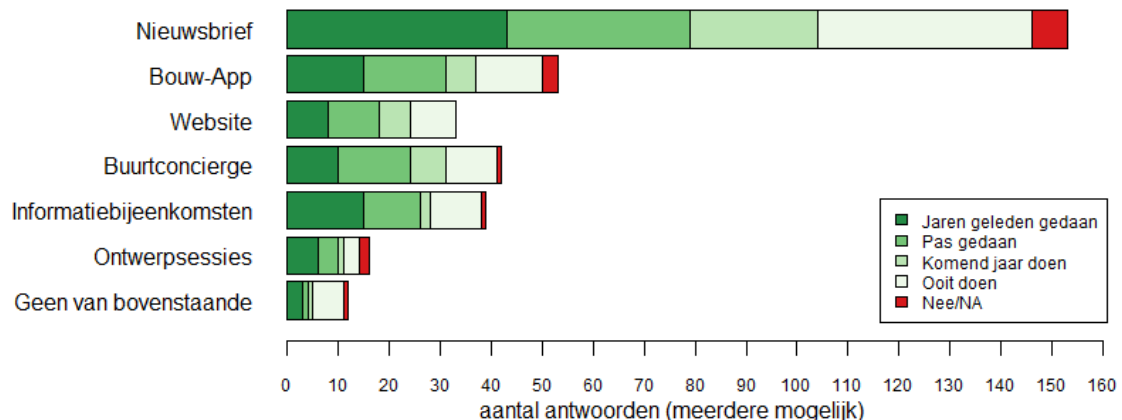
As described above, the small number of respondents who did not participate in any activities makes it virtually impossible to establish a causal relationship between participation and adaptation measures. Almost all respondents indicated that they had at least read the newsletter. Only 10 respondents did not take part in any participation activities. Additionally, the number of respondents who had not carried out any adaptation measures and were not planning to do so was relatively small (15 out of 88 respondents) as well. These numbers are too small to explain differences through statistical analysis or generalize to a larger group of people.

Another obvious hypothesis that we investigated further is: **the more intensive the participation, the more implementation of adaptation measures**. To investigate this hypothesis, we first categorised the participation activities according to levels of involvement. Informative participation activities (e.g. reading the newsletter) received the lowest score, and measures that actively involve residents received the highest score (see Warbroek et al, 2021).

We could not find any direct correlation between the intensity of participation and the extent to which measures were implemented. Additionally, we assessed intensity differently whereby participation that required little time or effort received a low score and participation that required a relatively large amount of time or effort received a higher score. Lastly, we summed up the number of participation activities in which one respondent participated. The results remained ambiguous for all approaches:

- 1) The participation of respondents who took adaptation measures varied: some indicated that they had participated in participation activities and others indicated that they had not.
- 2) Of the respondents who did participate, several indicated that they did not implement any adaptation measures (see figure below).
- 3) The highest intensity of participation is not directly related to a higher degree of implementation. On further examination, this is logical: measures implemented in the (distant) past were not influenced by recent participation activities. However, the data also do not show any significant differences between respondents who implemented measures years ago, those who intend to do so, and those who do not plan to do anything.

The figure below illustrates the extent to which respondents have taken, or want to take, measures and their participation in participation activities.



**Figuur 44:** Overview of the relationship between taken measures (per respondent) and participation attendance.

### Visitors of the Website

The website [www.groenblauwenschede.nl](http://www.groenblauwenschede.nl) was mentioned several times in the newsletter and on the Bouw-App. Part of the website is specifically aimed at inhabitants who are interested in taking measures on their own property. 13 respondents indicated that they had visited the website. All 13 respondents indicated that they had also read the newsletter. Only 3 of the 13 respondents had also spoken to the neighbourhood concierge. In other words: the respondents most likely went to the website because of the newsletter or the Bouw-App, but not after having spoken to the neighbourhood concierge. Of the website visitors, all had implemented at least 2 of the 5 measures. 5 of the 13 had already implemented, or were planning to implement, all five measures. This includes the implementation of a green roof. Another 2 people had already implemented, or were planning to implement, 4 measures (all but the green roof). It is difficult to attribute causality to the use of the

website and the taking of measures. However, we can conclude that the respondents who visited the website are very motivated and actually implement measures. In this respect, this group performs better than all other groups in terms of recent and intended implementation of measures. Visitors of the website even take measures more often than respondents who had contact with the neighbourhood concierge.

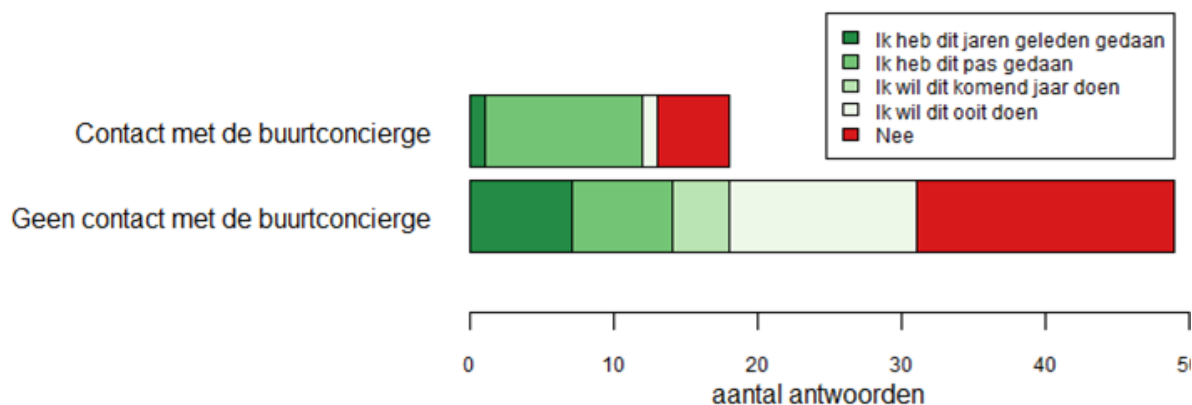
### **The Influence of the Neighbourhood Concierge on the Decoupling of Rainwater Pipes**

We specifically looked at the influence of the neighbourhood concierge on the decoupling of rainwater pipes, as this was his main mandate. Since only 20 respondents spoke to the neighbourhood concierge and only 26 respondents decoupled their rainwater pipes, we do not have enough data to draw conclusions that are statistically significant. However, we can draw a number of qualitative conclusions. Of the 18 respondents who had contact with the neighbourhood concierge and had the opportunity to implement this measure, 11 respondents indicated that they recently decoupled their rainwater pipes. 10 of the 11 respondents gave as their motivation a) the neighbourhood concierge recommended it, b) to reduce water nuisance, or c) both. In other words, the majority of respondents who spoke with the neighbourhood concierge subsequently decoupled their rainwater pipes. The majority of this group (8 out of 11) did so specifically because of the recommendation of the neighbourhood concierge. These results show that the deployment of the neighbourhood concierge has been a great success.

If we compare these results with respondents who had not spoken to the neighbourhood concierge, the influence becomes even more obvious. In total, we asked 49 respondents who had not spoken to the neighbourhood concierge about decoupling rainwater pipes. Between the group who did not speak to the neighbourhood concierge (group A) and the group who did (group B), there is a striking difference comparing the number of respondents who plan to carry out the measure and the number of those who have (recently) carried out the measure. In group B, the number of respondents who had recently implemented the measures (11 of the 18, 61%) is by far the highest. This group is also more than twice as big as the group after it, the respondents who do not want to carry out the measures (5 out of 18, 28%). Only one person in this group has expressed the intention to implement this measure in the future. This is completely different in group A. Here, implementation, intention to implement and no intention are all similar sizes. The group of respondents that has implemented this measure is the smallest (14 out of 49, 29%). Half of them had already carried out the measure some time ago, while the other half had done so recently. The group that plans to take measures in the future (17 out of 49, 35%) is the second largest. The largest group is the respondents who do not plan to carry out this measure with 18 of 49 (37%).

It is striking that in group B, which talked to the neighbourhood concierge, intention to implement was as good as gone whereas in the control group intention to implement was as big, if not bigger than the other two options. We can conclude from these results that participation can move respondents from the intention towards implementation of measures.

Another interesting facet is that people who decoupled some time ago, did so to conserve water. This indicates a strong intrinsic motivation. If the municipality wants to promote these and other water-saving measures, capitalising on this motivation may prove successful.



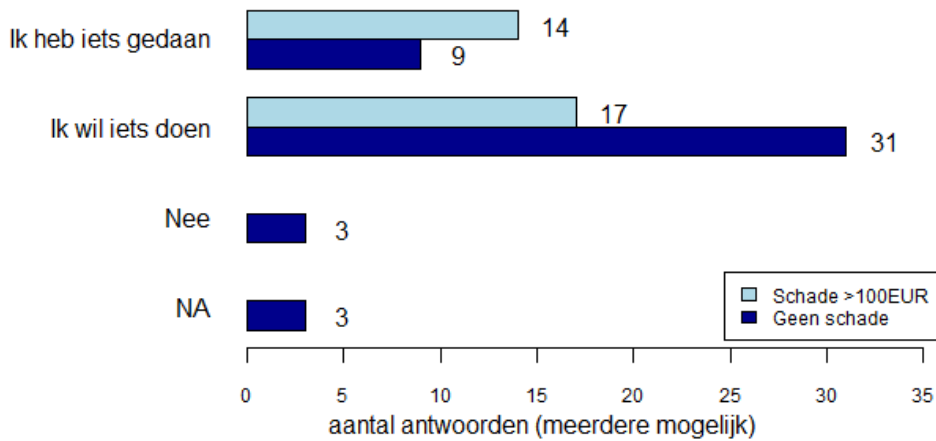
**Figuur 45:** Overview of relationship between contact with the neighbourhood concierge and decoupling the rainwater pipe. regenpijp

### *Influence of Previous Damage on Adaptation Behaviour*

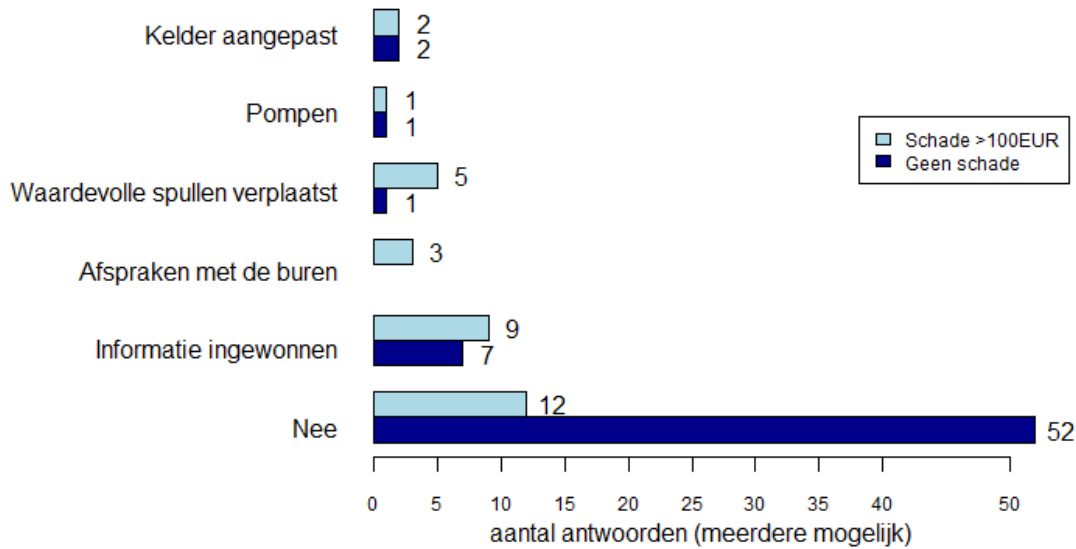
Literature and practice often assume that respondents who have experienced an extreme weather event will be more motivated to take action than respondents who have not (van Valkengoed and Steg, 2019). We do not see this relationship in our data. Experience alone does not have an impact on taking adaptation measures. Not all or even most respondents who experienced some form of water nuisance implemented more measures or were more motivated to take measures. There are a number of possible explanations.

First, water problems were largely solved by the municipality through the Stadsbeek project. However, as shown in figure 13, the majority of the respondents (53%) did not know whether the measures taken by the municipality were sufficient. At the same time, only 3% of the respondents indicated that they thought these measures were inadequate. The remaining respondents (43%) indicated that they thought the measures were sufficient for the time being. Uncertainty about the effectiveness of measures could therefore be a motive for taking measures. At the same time, respondents rarely mentioned water nuisance as a motive for implementing measures.

Second, many respondents experienced water nuisance but did not report any financial damage. If we only look at respondents who reported financial damage, a different picture emerges. 26 respondents reported financial damage of 100 euros or more due to water nuisance. This is a much smaller number than the respondents who reported some form of damage. Everyone in this group did take some measure to prevent water nuisance. This effect is especially present among the respondents who reported extra protective measures. Everyone (88 respondents) was asked about these additional, non-structural measures, as many of these measures did not require owning a house or even living in a house. More than half (14 out of 26) of the respondents who had suffered financial damage took some additional measures. In contrast, only 17 out of 69 respondents (about 1 out of 4) who did not experience financial damage took any of the additional measures that were mostly free and easy to implement (for example: moving valuables or making arrangements with neighbours). The main motivation to take these measures was to limit damage to the house or to prevent future damage. This is logical, as these measures have no other benefits. In other words, respondents were generally reluctant to deal with water nuisance unless they had already suffered financial damage.



**Figuur 1:** Comparison implementation measures of the respondent with damage vs. without damage.

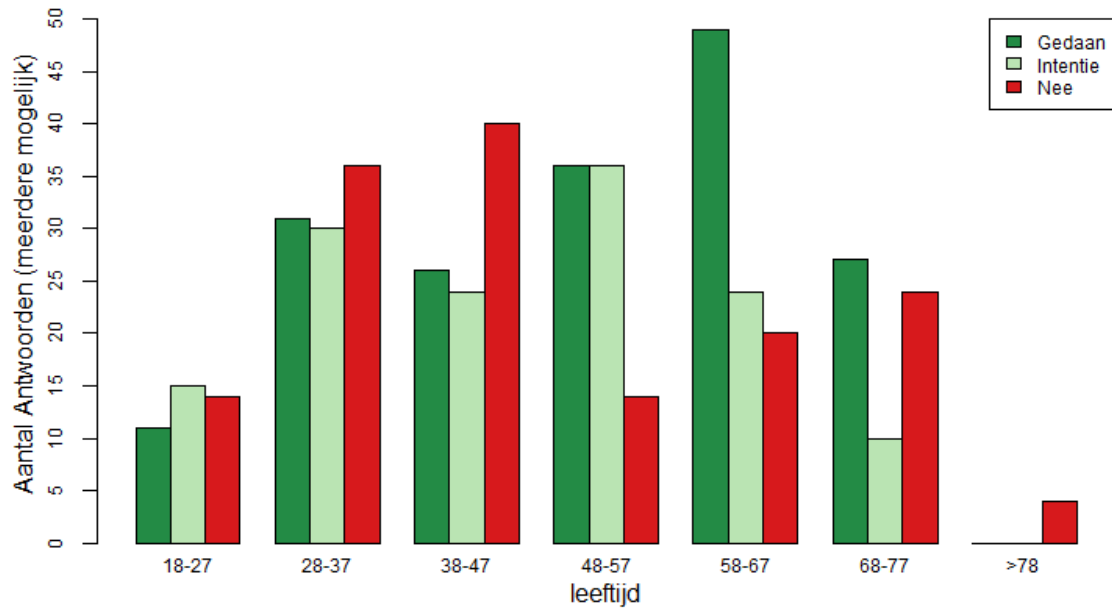


**Figuur 2:** Comparison implementation further measures of the respondents with damage vs. without damage.

### *The Influence of Age on the Implementation of Measures*

Literature shows that there is a connection between taking measures and age (cf. Noll et al. 2021). Older people have taken measures more often in the past and plan to do so less often. As the figure below shows, our survey confirms this. Respondents in the group above 68 years old have taken measures relatively often, but less so recently. Older people are less likely to plan to take measures. The intention, both vague and concrete, reaches a peak in the age group between 48 and 57 years and decreases steadily. The "no" intention increases and the intention to carry out measures in the coming year falls away completely above the age of 68. This is not surprising. However, it is worrying in view of other effects of climate change, such as heat stress. Literature shows that this population group, which is particularly vulnerable to heat stress, is also not inclined to take measures to combat it (Noll et al. 2021).





**Figuur 3:** Comparison implementation of measures per age group.

## 9. Conclusions and Recommendations

This part of the report draws conclusions from the findings of the study and based on the previous chapters.

### *Conclusions*

In the Stadsbeek project, the municipality of Enschede has informed, consulted and actively involved residents in various ways. A complete inventory of applied participation activities per project phase can be found in a previously published report (Warbroek et al, 2021). This report focuses on the results of the survey carried out as part of the second part of the study. The research question we wanted to answer with this is: *“How can resident participation (in combination with other factors) contribute to the realisation of climate adaptation measures by residents on their own property?”*

To answer this research question, we distributed a survey in the districts Stadsveld and Pathmos. **88 households** (approximately 10% of households in these postcode areas) completed the survey. The survey provides a good overview of residents who own their own homes in these neighbourhoods and are inclined to participate in surveys or other participation activities. In the survey, we asked residents about the measures they already have in place or intend to implement and about factors that, according to theory, influence adaptation behaviour. Examples are motivation, capacity, risk perception, assessment of effectiveness and feasibility of measures. Social norms, but also age and engaging in participation activities, can influence these factors.

The survey covered 5 types of measures: 1) decoupling rainwater pipes; 2) removing pavement; 3) setting up a rain barrel; 4) planting trees; and 5) installing a green roof. Respondents were generally familiar with measures such as removing pavement (often through media) and decoupling rainwater pipes (often through the Stadsbeek project). Preventing water nuisance was not the main motivation for removing pavement or setting up a rain barrel. As a reason to remove pavement, people mainly mentioned wanting **more green** or because it **looks nice**. **Saving water** was the most important reason for placing a rain barrel. **Water nuisance** was the most cited reason for decoupling the rainwater pipe. With regard to the effectiveness of measures to prevent water nuisance, respondents relatively often doubted the **effectiveness** of decoupling and setting up a rain barrel. 23% of respondents said that a rain barrel was not an effective measure. Of all the measures, placing a green roof proved to be the least known. If people were aware of this, it was mainly through the media. Respondents saw the installation of a green roof as the most **expensive measure**. None of the respondents had implemented it, yet. However, a number of respondents were planning to do so.

The results show **no direct relationship** between **level of participation and level of adaptation behaviour**. Some respondents, who carried out adaptation measures, did and some did not engage in participation activities. Not all respondents who participated, carried out adaptation measures. However, we do see that those who did participate in participatory activities were relatively more likely to have taken adaptation measures than those who did not. However, the data do not show any simple relationship between the level of participation and the level of adaptation. To prove a statistical connection with the current data is difficult, because the "not active" group of respondents is relatively small. Only 10 out of 88 respondents indicated that they did not engage in any participation activities. And only 15 out of 88 respondents indicated they neither took nor want to take any adaptation measures. The final analysis is therefore mainly qualitative.

Three participation activities show striking results: the newsletter, the website and the neighbourhood concierge. The **newsletter** was widely read among respondents, 76 of 88 respondents indicated that they read the newsletter. Half of the newsletter readers also participated

in another activity. Only 2 respondents indicated that they did not read the newsletter but did take part in another activity. Alongside the Bouw-App, the newsletter was one of the means used to draw attention to the [www.groenblauwenschede.nl](http://www.groenblauwenschede.nl) website. The group of respondents who visited the website performed best in terms of recent and intended implementation of measures. This shows that the website attracts the most motivated residents. Finally, the **neighbourhood concierge** appears to be a very effective way to actually encourage people to decouple their rainwater pipes. In the group that has not had contact with the neighbourhood concierge, the number of people who are intending to do so, but have not done so, yet, is significantly larger than in the group that talked with the neighbourhood concierge.

Regarding the influence of other factors, the experience of water nuisance seems to play a less important role in this project than is often assumed in the literature (cf. Valkengoed, 2019). We see two main explanations. First, the measures taken by the municipality solved these problems and residents no longer feel the need to act. However, the majority of respondents are not sure about this. Second, there appears to be a big difference between respondents who experienced financial damage due to water nuisance and those who did not. Respondents who did experience **financial damage** were twice as likely to take additional measures to prevent water nuisance as residents who had not experienced financial damage. **Age** also influences the extent to which people have taken and want to take measures. Older people have taken measures relatively more often and less often intend to take measures in the future. Our research shows that middle-aged people are most likely to take measures. Based on the survey, no clear conclusions can be drawn on the role of other factors such as social norms.

### *Recommendations*

Based on this study, we make a number of recommendations. These recommendations are aimed at the municipality of Enschede but are also relevant to other municipalities that wish to activate inhabitants to implement adaptation measures on their own property.

#### **Communicate Measures by Residents as an Explicit Part of Participation**

In the Stadsbeek project, inhabitants were informed, consulted and actively involved in many ways. The initial focus of many of the participation activities was gaining support for the project. Only later in the project were inhabitants encouraged to take measures themselves: the neighbourhood concierge and the website [www.groenblauwenschede.nl](http://www.groenblauwenschede.nl). Both participation activities were remarkably successful. Both, respondents who spoke with the neighbourhood concierge and respondents who visited the website indicated that they had recently taken measures. If taking action by inhabitants is a project objective, we recommend explicitly informing residents about how they can contribute to adaptation and making the encouragement of residents an explicit part of the participation strategy. This has clearly paid off in the last part of the Stadsbeek project. Using already established media, such as a newsletter and/or the Bouw-App, proved an effective strategy to reach those inhabitants interested in becoming active themselves.

#### **Connect to Different Motivations in Your Communication Strategy**

A striking result is that respondents have various reasons for taking green and blue measures. Water nuisance is just one of them. More green or biodiversity, increasing the value of the house or saving water are other examples. The municipality can respond to these motivations, especially in areas where residents do not care about the environment or the community. Here, the lifestyles of "ons water" ([www.onswaterleefstijlvinder.nl](http://www.onswaterleefstijlvinder.nl)) can provide an indication. Although many neighbourhoods have one predominant lifestyle, in practice they have a diverse composition. The results of the survey also clearly show this. Therefore, we recommend using a varied communication strategy and

responding to different motivations instead of tailoring the communication to one particular type in one particular neighbourhood.

### **Ensure that Residents Feel Positive about Their Own Capacity**

In order to implement a measure, residents must believe that they have the capacity to do so. In other words, they must feel that they have the means (time, money, knowledge, etc.) to implement a measure. Measures such as the neighbourhood concierge, the decoupling of rain pipes for inhabitants, or collecting pavement strengthen this. They remove extra steps for residents and make implementation much easier. Subsidies can also have a positive effect on the assessment of someone's capacity. The latter is particularly important for more costly measures, such as green roofs. Not a single resident had taken this measure, yet, and respondents assessed it as relatively expensive. Providing easily accessible and understandable information could be another avenue. One respondent, for example, indicated that he was interested in setting up a rain barrel. However, this resident thought it was expensive and did not know how to go about it. This example shows that even the most basic information can be of value to someone.

### **Monitor and Evaluate Participation Activities (when they happen)**

It is impossible to measure the effects of a participation activity done in the past. We have done our best to include participation activities from the whole Stadsbeek project. However, the results related to activities carried out several years ago are sparse. We recommend to monitor activities while they are carried out or immediately after they have been carried out. Preferably by using surveys that are more compact than the one conducted for this study. This will allow for activities to be adapted if necessary and provide insights into the effectiveness. By monitoring and evaluating, less successful activities can be adjusted and successful activities can be scaled up.

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## Annex 1 – Respondents per street

B.W. ter Kuilestraat	9
Beukstraat	5
Dr. Lovinkstraat	1
Dr. Van Hoekstraat	3
Eikstraat	9
Elferinksweg	16
Esdoornstraat	3
Goudenregenstraat	6
J.H.W. Robersstraat	1
Josinkmorsplein	1
Kastanjestraat	4
Larixstraat	1
Lindestraat	9
Plataanstraat	1
Tweede Emmastraat	2
Vorstmanplantsoen	1
Wethouder Nijhuisstraat	1
Willem de Clercqstraat	1
Zweringweg	6
NA	8

## Annex 2 – Instruments for Behaviour Change

Classification of Behaviour-changing Instruments Mosler & Tobias (2007) p.42 (own translation)

<b>Instruments Triggering New Behaviours/ Dispositions</b>	
<b>Structurally focused Instruments</b> Change Behavioural Context	<b>Instruments focused on Individuals</b> Persuade or motivate to act
<b>Mandates / Restrictions</b> Environmental protection Emissionscap Spatial planning provisions Liabilities	<b>Knowledge Transfer</b> System-oriented knowledge Action-oriented knowledge Effect-oriented knowledge
<b>Market-based instruments</b> Subsidies Fees New markets (i.e. Emission trading) Competition	<b>Argumentative Persuasion</b> To Change: Convictions Perceived Resources Norms Goals Values
<b>Agreements</b> Certificates and Labels Industry Standards	<b>Affective Persuasion</b> To Change: Current Affect Affective connotations Intrinsic motivation
<b>Service- / Infrastructure Instruments</b> Provision or Retraction of Products Provision or Deconstruction of Infrastructures Provision of Resources Physical Necessity	<b>Requests</b> For a certain behaviour To reflect To trigger cognitive dissonance

**Instruments Encouraging New Behaviours based on existing Dispositions**

<p><b>Instruments focused on Situations</b> Highlight situations for changed behaviour</p>	<p><b>Instruments focused on Upscaling</b> Upscaling individual behaviours into society</p>
<p><b>Passive Instruments focused on Individuals</b> Reminders Sign Posts Direct Feedback</p>	<p><b>Passive Instruments focused on groups</b> Insurance All-or-nobody-contracts</p>
<p><b>Passive Instruments focused on Groups</b> Highlighting of Descriptive Norms</p>	<p><b>Passive Instruments focused on Networks</b> Diffusion via:     Personal Contacts     Mass media     Sold Products</p>
<p><b>Active Instruments focused on Individuals</b> Goal Setting Private Commitment Self-feedback</p>	<p><b>Active Instruments focused on Groups</b> Participation Collective action</p>
<p><b>Active Instruments focused on Groups</b> Public Commitment Best Practices / Models</p>	<p><b>Active Instruments focused on Networks</b> Meetings Creation of Interest groups Creation of informal "Markets" Neighbourhood Support</p>



## Annex 3 – Survey [Dutch]

Start of Block: Algemene Informatie - May 18, 2021

I1 Bedankt dat u mee wilt doen aan dit onderzoek van de Universiteit Twente en de gemeente Enschede. Dit onderzoek gaat over het project Stadsbeek. In dit project pakken we wateroverlast in de wijken Pathmos en Stadsveld aan. Ook kijken we hoe we deze wijken groener en mooier kunnen maken. Wij zijn benieuwd of het project Stadsbeek u heeft geïnspireerd om ook op uw terrein maatregelen te nemen. Tegen wateroverlast, of gewoon om uw tuin groener en mooier te maken.

End of Block: Algemene Informatie - May 18, 2021

Start of Block: Over de vragenlijst - May 18, 2021

I2 Het invullen van deze vragenlijst duurt ongeveer 15 minuten. De vragenlijst is opgedeeld in 5 delen:

- Deel 1: Uw achtergrond en woonsituatie
- Deel 2: Het Project Stadsbeek
- Deel 3: Uw contacten in de buurt
- Deel 4: Uw opvattingen over wateroverlast
- Deel 5: Voorzorgsmaatregelen om wateroverlast te voorkomen

End of Block: Over de vragenlijst - May 18, 2021

Start of Block: Gebruik van Data - May 18, 2021

GRD

De gegevens die wij verzamelen zijn niet te herleiden naar u als individu. Uw antwoorden en opvattingen blijven anoniem.

De gegevens worden opgeslagen volgens de Algemene Verordening Gegevensbescherming (AVG). U kunt zich op elk gewenst moment terugtrekken uit het onderzoek.

GRD\_Accept

Gaat u akkoord dat uw antwoorden worden verwerkt zoals hierboven beschreven?

- Ja (1)
- Nee (2)

End of Block: Gebruik van Data - May 18, 2021

Start of Block: Deel 1: Uw achtergrond en woonsituatie - May 18, 2021

Background Deel 1: Uw achtergrond en woonsituatie

postcode

Voor ons onderzoek moeten we weten waar u ongeveer woont.

Wat is uw postcode? (nummers EN letters, i.e. 7543XX)

---

age Wat is uw leeftijd?

- 18-27 jaar (1)
- 28-37 jaar (2)
- 38-47 jaar (3)
- 48-57 jaar (4)

- 58-67 jaar (5)
- 68-77 jaar (6)
- 78-87 jaar (7)
- 88 jaar of ouder (8)

gender Bent u een ...?

- Man (1)
- Vrouw (2)
- Anders (3)

education Wat is uw hoogst voltooide opleiding?

- Basisschool (1)
- Voortgezet onderwijs (2)
- MBO (3)
- HBO/WO/postdoctoraal (4)

house\_type In wat voor huis woont u?

- Appartement zonder tuin (1)
- Appartement met tuin (6)
- Tussenwoning of rijtjeshuis (2)
- Twee-onder-een-kap of hoekhuis (3)
- Vrijstaand huis (4)
- Anders (5)

house\_floor Welke verdiepingen gebruikt u? (Meerdere antwoorden mogelijk)

- Kelder (1)
- Begane grond (2)
- Eerste verdieping en/of hoger (3)

house\_maintenance Hoe goed is het gebouw waarin u woont onderhouden?

- Goed (1)
- Redelijk (5)
- Slecht (30)

house\_ownership In wat voor huis woont u?

- Huurwoning (1)
- Koopwoning (2)
- Anders (3)

house\_year Sinds welk jaar woont u in uw huis?

---

house\_future Hoe lang denkt u nog in uw huis te blijven wonen?

- Minder dan 1 jaar (1)
- 1 tot 5 jaar (2)
- 5 tot 10 jaar (3)
- 10 jaar of langer (4)
- Weet ik niet (5)

household\_size Hoeveel volwassenen wonen in uw huis (in totaal)?

- 1 persoon (1)
- 2 personen (2)
- 3 personen (3)
- 4 personen (4)
- 5 of meer personen (5)

household\_dependents

Is iemand in uw huis van u afhankelijk?

(Meerdere antwoorden mogelijk)

- Ja - één of meer personen met een beperking (1)
- Ja – één of meer kinderen jonger dan 12 jaar (2)
- Ja – één of meer kinderen 13-18 jaar (3)
- Ja – één of meer ouderen (4)
- Nee (5)
- Zeg ik liever niet (6)

risk\_overall Neemt u weleens risico's in uw leven?

- Nee (6)
- Heel soms (1)
- Regelmatig (5)
- Vaak (7)

responsibility

Om wateroverlast te voorkomen kunnen bewoners of de gemeente iets doen. Bent u bereid zelf iets te doen om wateroverlast te voorkomen?

(Meerdere antwoorden mogelijk)

- Nee, dit moet de gemeente doen (1)
- Ja, maar alleen als aanvulling op dingen die de gemeente doet (2)
- Ja, maar alleen als het mij geen tijd of geld kost (3)
- Ja, maar alleen als mijn buurtgenoten dit ook doen (4)
- Ja, ongeacht wat anderen doen of wat het mij kost (5)

Page Break

End of Block: Deel 1: Uw achtergrond en woonsituatie - May 18, 2021

Start of Block: Deel 2: Het project Stadsbeek

Stadsbeek project

Deel 2: Het project Stadsbeek

In dit deel stellen we een aantal vragen over het project Stadsbeek.



RP\_project

In het

project Stadsbeek zijn een beek, waterberging en infiltratie- en drainageleidingen aangelegd om overlast door hevige regenval of een hoge grondwaterstand te verminderen.

Is dit project voldoende om wateroverlast te voorkomen?

- Ja – dit is voor nu en de nabije toekomst (30+ jaar) voldoende (1)
- Ja – maar meer is nodig binnen 10 jaar (2)
- Nee – onvoldoende (3)
- Weet ik niet (4)



PE\_overview

Wat is op u van toepassing?

(Meerdere antwoorden mogelijk)

- Ik heb de nieuwsbrief van het project Stadsbeek gelezen (1)
- Ik heb de website groenblauwenschede.nl bezocht (2)
- Ik gebruik de Bouw-App voor het project Stadsbeek (3)
- Ik was aanwezig bij één of meer informatiebijeenkomsten over het project Stadsbeek tussen 2016 en 2020 (4)
  - Ik was aanwezig bij ontwerpessies voor de aanleg van de Stadsbeek, de binnentuinen aan de Rembrandtlaan of het Pinkeltjesplein. (5)
- Ik heb contact gehad met de buurtconciërge (6)
- Geen van bovenstaande (7)

*Skip To: PE\_usefulness If Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Geen van bovenstaande*

*Display This Question:*

*If Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik heb contact gehad met de buurtconciërge*



PE\_buurtconciërge

Kijkt u door het contact met de buurtconciërge anders aan tegen wateroverlast?

	Helemaal eens (1)	Eens (2)	Neutraal (3)	Oneens (4)	Helemaal oneens (5)
Ik weet nu beter wat ik zelf zou kunnen doen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer zin om hier zelf ook iets aan te doen (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat ik zelf iets kan doen (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat we als buurt iets kunnen doen (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat de gemeente aandacht heeft voor onze zorgen (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

*Display This Question:*

*If Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik heb de nieuwsbrief van het project Stadsbeek gelezen*

*Or Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik gebruik de Bouw-App voor het project Stadsbeek*

*Or Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik was aanwezig bij één of meer informatiebijeenkomsten over het project Stadsbeek tussen 2016 en 2020*

*Or Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik was aanwezig bij ontwerpessies voor de aanleg van de Stadsbeek, de binnentuinen aan de Rembrandtlaan of het Pinkeltjesplein.*

*Or Wat is op u van toepassing? (Meerdere antwoorden mogelijk) = Ik heb de website groenblauwenschede.nl bezocht*



PE\_impact

Kijkt u door de nieuwsbrieven of bijeenkomsten van het Stadsbeek project anders aan tegen wateroverlast?

	Helemaal eens (1)	Eens (2)	Neutraal (3)	Oneens (4)	Helemaal oneens (5)
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ik weet nu beter wat ik zelf zou kunnen doen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer zin om hier zelf ook iets aan te doen (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat ik zelf iets kan doen (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat we als buurt iets kunnen doen (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb nu meer het gevoel dat de gemeente aandacht heeft voor onze zorgen (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



### PE\_usefulness

Hoe nuttig vindt u de volgende onderdelen van het project Stadsbeek?

(het maakt niet uit of u hier zelf mee in aanraking bent gekomen)

	Heel nuttig (1) Een beetje nuttig (2) Niet nuttig (3) Ik weet het niet (5)			
	1)	(2)	)	(5)
De nieuwsbrief (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De website groenblauwenschede.nl (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De bouw-app voor het project Stadsbeek (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De informatiebijeenkomsten over het project (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De ontwerpessies voor het project (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De buurtconciërge (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

End of Block: Deel 2: Het project Stadsbeek

Start of Block: Deel 3: Uw contacten in de buurt

### Social Connections

Deel 3: Uw contacten in de buurt

In dit deel van

de vragenlijst stellen we vragen over het onderlinge contact tussen u en uw buurtgenoten.

SN\_groups Bent u in uw eigen buurt actief betrokken bij een vereniging of club (bv. kerk, moskee, sportclub, boekenclub, kookclub, buurtorganisatie)?

- Ja (1)
- Nee (2)

SN\_neighbors\_1 Met hoeveel buurtgenoten heeft u contact?

- Geen (1)
- Enkele (1 tot 4 huishoudens) (2)
- Veel (5 of meer huishoudens) (3)
- Weet niet (4)

Skip To: SN\_overview If Met hoeveel buurtgenoten heeft u contact? = Geen



## SN\_neighbors\_2

Wat voor contact heeft u met uw buurtgenoten?

(Meerdere antwoorden mogelijk)

- We groeten elkaar (1)
- Onze kinderen spelen samen (2)
- We maken regelmatig een praatje (3)
- We doen af en toe dingen samen (bv. buurtfeest of barbecue) (4)
- We hebben een groepsapp (5)
- We letten op elkaars huizen of spullen (6)
- We bespreken onderwerpen waar we ons zorgen over maken in onze buurt of straat (bv. wateroverlast) (7)
- Overig (8)



SN\_overview Bent u het eens met de volgende uitspraken?

	Helemaal eens (1)	Eens (2)	Neutraal (3)	Oneens (4)	Helemaal oneens (5)
Ik voel me thuis in deze buurt (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb een goede band met mijn buurtgenoten (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou liever in een ander deel van Enschede wonen. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind de uitstraling van mijn huis of tuin belangrijk (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik merk wanneer mijn buurtgenoten hun huis of tuin veranderen of opknappen. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

End of Block: Deel 3: Uw contacten in de buurt

Start of Block: Deel 4: Uw opvattingen over wateroverlast - May 18, 2021

RP

Deel 4: Uw opvattingen over wateroverlast

Dit deel van de vragenlijst gaat over uw ervaring met wateroverlast.



## RP\_experience

Heeft u ooit wateroverlast ervaren en hier last van gehad?

(Meerdere antwoorden mogelijk)

- Ik heb nooit wateroverlast ervaren (5)
- Ja, wateroverlast ervaren maar geen last van gehad (6)
- Ja, schade aan mijn huis, tuin of eigendommen door extreme regenval (1)
- Ja, schade aan mijn huis, tuin of eigendommen door een hoge grondwaterstand (2)
- Ja, gezondheidsklachten door wateroverlast in mijn huis (bv. door schimmelvorming) (3)
- Ja, verkeershinder door wateroverlast (4)

Display This Question:

If Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, schade aan mijn huis, tuin of eigendommen door extreme regenval

Or Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, schade aan mijn huis, tuin of eigendommen door een hoge grondwaterstand

Or Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, gezondheidsklachten door wateroverlast in mijn huis (bv. door schimmelvorming)



RP\_experience\_year In welk jaar heeft u voor het laatst wateroverlast ervaren?

Display This Question:

If Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, schade aan mijn huis, tuin of eigendommen door extreme regenval

Or Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, schade aan mijn huis, tuin of eigendommen door een hoge grondwaterstand

Or Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, gezondheidsklachten door wateroverlast in mijn huis (bv. door schimmelvorming)



RP\_experience\_damage

Hoeveel financiële schade (schatting) denkt u dat de

LAATSTE wateroverlast heeft veroorzaakt aan uw persoonlijke eigendommen?

In Euro:

---

Display This Question:

If Heeft u ooit wateroverlast ervaren en hier last van gehad? (Meerdere antwoorden mogelijk) = Ja, gezondheidsklachten door wateroverlast in mijn huis (bv. door schimmelvorming)

RP\_experience\_health Hoeveel invloed heeft waterschade op uw gezondheid gehad?

- Ik heb korte tijd milde klachten gehad (1)
- Ik heb langere tijd milde klachten gehad (4)
- Ik heb korte tijd hevige klachten gehad waardoor ik mijn normale leven niet kon voortzetten. (5)
- Ik heb langere tijd hevige klachten gehad waardoor ik mijn normale leven niet kon voortzetten. (6)



RP\_house Verwacht u in de toekomst wateroverlast te hebben in huis? (bv. door zware regenval, storm of hoge grondwaterstand)

- Nee, mijn huis is helemaal veilig (1)
- Misschien, maar de kans is heel erg klein (2)
- Waarschijnlijk, maar niet elk jaar (3)
- Ja, ongeveer eens per jaar (5)
- Ja, meerdere keren per jaar (6)
- Weet niet (7)



RP\_change Denkt u dat wateroverlast in uw buurt verandert in de komende 10 jaar?

- Nee (1)
- Ja, toename (2)
- Ja, afname (3)
- Weet niet (4)



RP\_worry Bent u bezorgd over de mogelijke gevolgen van wateroverlast voor uw huis?

- Nee (1)
- Een beetje (2)
- Ja (3)
- Weet niet (4)



RP\_impact Als

u wateroverlast in uw buurt heeft, zal dit dan negatieve gevolgen voor de gezondheid van uzelf of iemand in uw huishouden hebben?

- Nee (1)
- Misschien (2)
- Waarschijnlijk wel (3)
- Zeker wel (4)
- Weet niet (5)

Page Break

End of Block: Deel 4: Uw opvattingen over wateroverlast - May 18, 2021

Start of Block: Deel 5: Eventuele voorzorgsmaatregelen - May 18, 2021

Measures Deel 5: Eventuele voorzorgsmaatregelen Dit deel van de vragenlijst gaat over de dingen die u kunt doen om wateroverlast te voorkomen.

M\_pipe\_info Hoeveel weet u over het afkoppelen van de regenpijp van de riolering?

- Veel (1)
- Een beetje (2)
- Niets (3)

Skip To: M\_green\_info If Hoeveel weet u over het afkoppelen van de regenpijp van de riolering? = Niets



M\_pipe\_channel Hoe heeft u gehoord over het afkoppelen van de regenpijp? Via...

- Familie of vrienden (1)
- Buren (2)
- Media (3)
- Het project Stadsbeek (6)
- De gemeente/buurtconciërge (4)
- Anders, namelijk: (5)

M\_pipe\_capacity Bent u het eens met de volgende uitspraken over het afkoppelen van de regenpijp?

Display This Choice:

If In wat voor huis woont u? = Koopwoning

And In wat voor huis woont u? != Appartement zonder tuin

Display This Choice:

If In wat voor huis woont u? != Appartement zonder tuin

And In wat voor huis woont u? = Koopwoning

	Sterk mee eens (1)	Mee eens (2)	Neutraal (3)	Mee oneens (4)	Sterk mee oneens (5)
Ik denk dat dit helpt om wateroverlast te voorkomen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Display This Choice: If In wat voor huis woont u? = Koopwoning And In wat voor huis woont u? != Appartement zonder tuin	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Ik heb de middelen om dit te doen (3)	
Display This Choice: If In wat voor huis woont u? != Appartement zonder tuin And In wat voor huis woont u? = Koopwoning	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Ik denk dat dit relatief duur is (8)	

Display This Question:  
 If In wat voor huis woont u? = Appartement met tuin  
 Or In wat voor huis woont u? = Tussenwoning of rijtjeshuis  
 Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis  
 Or In wat voor huis woont u? = Vrijstaand huis  
 And In wat voor huis woont u? = Koopwoning

M\_pipe\_implement Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen?

- Ik heb dit jaren geleden gedaan (1)
- Ik heb dit pas gedaan (10)
- Ik wil dit komend jaar doen (11)
- Ik wil dit ooit doen (12)
- Nee (13)

Display This Question:  
 If Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik heb dit jaren geleden gedaan  
 Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik heb dit pas gedaan  
 Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik wil dit komend jaar doen  
 Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik wil dit ooit doen  
 And In wat voor huis woont u? = Appartement met tuin  
 Or In wat voor huis woont u? = Tussenwoning of rijtjeshuis  
 Or In wat voor huis woont u? = Vrijstaand huis  
 Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis  
 And In wat voor huis woont u? = Koopwoning



M\_pipe\_motivation

Waarom heeft u uw regenpijp afgekoppeld?

(Meerdere antwoorden mogelijk)

- De buurtconciërge heeft het aanbevolen (1)
- Het is gratis (2)
- Wateroverlast in de buurt te voorkomen (3)
- Vrienden/familie hebben het aanbevolen (6)
- Buurtgenoten doen het ook (4)
- Anders, namelijk (5)

M\_green\_info Hoeveel weet u over het verwijderen van bestrating om water makkelijker in de bodem te laten zakken?

- Veel (1)
- Een beetje (2)
- Niets (3)

Skip To: M\_barrel\_capacity If Hoeveel weet u over het verwijderen van bestrating om water makkelijker in de bodem te laten zakken? = Niets

Page Break



M\_green\_channel Hoe heeft u gehoord over het verwijderen van bestrating? Via...

- Familie of vrienden (1)
- Buren (2)
- Media (3)
- De gemeente/buurtconciërge (4)
- Anders, namelijk: (5)

M\_green\_capacity Bent u het eens met de volgende uitspraken over het verwijderen van bestrating?

*Display This Choice:*

*If In wat voor huis woont u? != Appartement zonder tuin*

*Display This Choice:*

*If In wat voor huis woont u? != Appartement zonder tuin*

	Helemaal eens (1)	Mee eens (2)	Neutraal (3)	Mee oneens (4)	Helemaal oneens (5)
Ik denk dat dit helpt om wateroverlast te voorkomen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Display This Choice:</i> <i>If In wat voor huis woont u? != Appartement zonder tuin</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb de middelen om dit te doen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Display This Choice:</i> <i>If In wat voor huis woont u? != Appartement zonder tuin</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat dit relatief duur is (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Display This Question:*

*If In wat voor huis woont u? = Appartement met tuin*

*Or In wat voor huis woont u? = Tussenwoning of rijtjeshuis*

*Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis*

*Or In wat voor huis woont u? = Vrijstaand huis*

M\_green\_implement Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen? (Meerdere antwoorden mogelijk)

- Ik heb jaren geleden gedaan (1)
- Ik heb dit pas gedaan (9)
- Ik wil dit komend jaar doen (5)
- Ik wil dit ooit doen (7)
- Nee (8)

*Display This Question:*

*If Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen? (Meerdere antwoorden mogelijk) = Ik heb jaren geleden gedaan*

*Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?*

*(Meerdere antwoorden mogelijk) = Ik heb dit pas gedaan*

*Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?*

*(Meerdere antwoorden mogelijk) = Ik wil dit komend jaar doen*

*Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?*

*(Meerdere antwoorden mogelijk) = Ik wil dit ooit doen*



M\_green\_motivation

Waarom heeft u uw bestrating deels verwijderd?

(Meerdere antwoorden mogelijk)

- Meer groen, vogels en insecten (2)
- Wateroverlast in de buurt te voorkomen (3)
- Vrienden/familie hebben het aanbevolen (6)
- Het ziet er mooi uit (7)
- Buurtgenoten doen het ook (4)
- De buurtconciërge heeft het aanbevolen (8)
- Anders, namelijk (5)

M\_barrel\_capacity Bent u het eens met de volgende uitspraken over het plaatsen van een regenton in uw tuin?

*Display This Choice:*

*If In wat voor huis woont u? != Appartement zonder tuin*

*Display This Choice:*

*If In wat voor huis woont u? != Appartement zonder tuin*

	Helemaal eens (1)	Mee eens (2)	Neutraal (3)	Mee oneens (4)	Helemaal oneens (5)
Ik denk dat dit helpt om wateroverlast te voorkomen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Display This Choice:</i> <i>If In wat voor huis woont u? != Appartement zonder tuin</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb de middelen om dit te doen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Display This Choice:</i> <i>If In wat voor huis woont u? != Appartement zonder tuin</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat dit relatief duur is (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Display This Question:*

*If In wat voor huis woont u? = Appartement met tuin*

*Or In wat voor huis woont u? = Tussenwoning of rijtjeshuis*

*Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis*

*Or In wat voor huis woont u? = Vrijstaand huis*

M\_barrel\_implementation Heeft u een regenton of wilt u er één (extra) plaatsen?

(Meerdere antwoorden mogelijk)

- Ik heb dit jaren geleden gedaan (1)
- Ik heb dit pas gedaan (9)
- Ik wil dit komend jaar doen (5)
- Ik wil dit ooit doen (7)
- Nee (8)

*Display This Question:*

*If Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)*

*= Ik heb dit jaren geleden gedaan*

*Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)*

*= Ik heb dit pas gedaan*

*Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)*

*= Ik wil dit komend jaar doen*

Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)  
 = Ik wil dit ooit doen



M\_barrel\_motivation

Waarom heeft u een regenton?

(Meerdere antwoorden mogelijk)

- Wateroverlast in de buurt te voorkomen (3)
- Vrienden/familie hebben het aanbevolen (7)
- Water besparen (6)
- Buurtgenoten doen het ook (4)
- Anders, namelijk (5)

M\_trees\_capacity Bent u het eens met de volgende uitspraken over het planten van bomen?

Display This Choice:

If In wat voor huis woont u? != Appartement zonder tuin

Display This Choice:

If In wat voor huis woont u? != Appartement zonder tuin

	Helemaal eens (1)	Eens (2)	Neutraal (3)	Oneens (4)	Helemaal oneens (5)
Ik denk dat dit helpt om wateroverlast te voorkomen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Display This Choice: If In wat voor huis woont u? != Appartement zonder tuin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb de middelen om dit te doen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Display This Choice: If In wat voor huis woont u? != Appartement zonder tuin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat dit relatief duur is (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If In wat voor huis woont u? = Appartement met tuin

Or In wat voor huis woont u? = Tussenwoning of rijtjeshuis

Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis

Or In wat voor huis woont u? = Vrijstaand huis

M\_trees\_implement Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)

- Ik heb dit jaren geleden gedaan (1)
- Ik heb dit pas gedaan (9)
- Ik wil dit komend jaar doen (5)
- Ik wil dit ooit doen (7)
- Nee (8)

Display This Question:

If Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
 = Ik heb dit jaren geleden gedaan

And Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
 = Ik heb dit pas gedaan

And Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
 = Ik wil dit komend jaar doen

And Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
 = Ik wil dit ooit doen



### M\_trees\_motivation

Waarom wilt u een boom planten?

(Meerdere antwoorden mogelijk)

- Wateroverlast in de buurt te voorkomen (3)
- Vrienden/familie hebben het aanbevolen (7)
- Het ziet er mooi uit (8)
- Meer groen, vogels en insecten (6)
- Buurtgenoten doen het ook (4)
- Anders, namelijk (5)

### M\_roof\_info Hoeveel weet u over het aanbrengen van een groen dak?

- Veel (1)
- Een beetje (2)
- Niets (3)

Skip To: M\_soft\_overview If Hoeveel weet u over het aanbrengen van een groen dak? = Niets



### M\_roof\_channel Hoe heeft u gehoord over het aanbrengen van een groen dak? Via...

- Familie of vrienden (1)
- Buren (2)
- Media (3)
- De gemeente/buurtconciërge (4)
- Anders, namelijk: (5)

### M\_roof\_capacity Bent u het eens met de volgende uitspraken over het plaatsen van een groen dak?

Display This Choice:

If In wat voor huis woont u? = Tussenwoning of rijtjeshuis  
 Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis  
 Or In wat voor huis woont u? = Vrijstaand huis  
 And In wat voor huis woont u? = Koopwoning

Display This Choice:

If In wat voor huis woont u? = Tussenwoning of rijtjeshuis  
 Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis  
 Or In wat voor huis woont u? = Vrijstaand huis  
 And In wat voor huis woont u? = Koopwoning

	Helemaal eens (1)	Eens (2)	Neutraal (3)	Oneens (4)	Helemaal oneens (5)
Ik denk dat dit helpt om wateroverlast te voorkomen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Display This Choice: If In wat voor huis woont u? = Tussenwoning of rijtjeshuis Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis Or In wat voor huis woont u? = Vrijstaand huis And In wat voor huis woont u? = Koopwoning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ik heb de middelen om dit te doen (3 )

*Display This Choice:*

*If In wat voor huis woont u?*

*= Tussenwoning of rijtjeshuis*

*Or In wat voor huis woont u? =*

*Twee-onder-een-kap of hoekhuis*

*Or In wat voor huis woont u?*

*= Vrijstaand huis*

*And In wat voor huis woont u?*

*= Koopwoning*

Ik denk dat dit relatief duur is (4)

*Display This Question:*

*If In wat voor huis woont u? = Tussenwoning of rijtjeshuis*

*Or In wat voor huis woont u? = Twee-onder-een-kap of hoekhuis*

*Or In wat voor huis woont u? = Vrijstaand huis*

*Or In wat voor huis woont u? = Anders*

*And In wat voor huis woont u? = Koopwoning*

M\_roof\_implement Heeft u een groen dak geplaatst of wilt u dit gaan doen?

- Ik heb dit jaren geleden gedaan (1)
- Ik heb dit pas gedaan (9)
- Ik wil dit komend jaar doen (5)
- Ik wil dit ooit doen (7)
- Nee (8)

*Display This Question:*

*If Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik heb dit jaren geleden gedaan*

*And Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik heb dit pas gedaan*

*And Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik wil dit komend jaar doen*

*And Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik wil dit ooit doen*



M\_roof\_motivation

Waarom heeft u een groen dak geplaatst?

(Meerdere antwoorden mogelijk)

- Wateroverlast in de buurt voorkomen (3)
- Meer groen, volgens en insecten (6)
- Het ziet er mooi uit (7)
- Familie/vrienden hebben het aanbevolen (8)
- Buurtgenoten doen het ook (4)
- Anders, namelijk (5)



M\_soft\_overview

Heeft u andere dingen gedaan om wateroverlast te voorkomen?

(Meerdere antwoorden mogelijk)

- Ik heb afspraken gemaakt met de burens (bijvoorbeeld bij afwezigheid) (1)
- Ik heb informatie ingewonnen (2)
- Ik heb waardevolle spullen verplaatst (3)
- Anders: (4) \_\_\_\_\_
- Nee (5)

*Display This Question:*

*If Heeft u andere dingen gedaan om wateroverlast te voorkomen?  
(Meerdere antwoorden mogelijk) != Nee*

M\_soft\_motivation Waarom heeft u dit gedaan?

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*Display This Question:*

*If If Waarom heeft u uw regenpijp afgekoppeld? (Meerdere antwoorden mogelijk)  
q://QID71/ChoiceDisplayed Is Displayed  
Or Or Waarom heeft u uw bestrating deels verwijderd? (Meerdere antwoorden mogelijk)  
q://QID74/ChoiceDisplayed Is Displayed  
Or Or Waarom heeft u een regenton? (Meerdere antwoorden mogelijk)  
q://QID79/ChoiceDisplayed Is Displayed  
Or Or Waarom wilt u een boom planten? (Meerdere antwoorden mogelijk)  
q://QID84/ChoiceDisplayed Is Displayed  
Or Or Waarom heeft u een groen dak geplaatst? (Meerdere antwoorden mogelijk)  
q://QID89/ChoiceDisplayed Is Displayed*

M\_damage-red Als u nadenkt over alles wat u heeft gedaan, of nog van plan bent te gaan doen (bv. afkoppelen, regenton, meer groen), wat denkt u dat de bijdrage is aan het verminderen van schade door wateroverlast?

- Ik denk dat deze maatregelen een klein deel van de schade zouden voorkomen (t/m 25%) (1)
- Ik denk dat deze maatregelen een deel van de schade zouden voorkomen (tussen 26%-50%). (2)
- Ik denk dat deze maatregelen een groot deel van de schade zouden voorkomen (tussen 51%-75%). (3)
- Ik denk dat deze maatregelen het meeste van de schade zouden voorkomen (tussen 76%-100%). (4)
- Ik weet het niet (5)

*Display This Question:*

*If Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik heb dit jaren geleden gedaan  
Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik heb dit pas gedaan  
Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik wil dit komend jaar doen  
Or Heeft u uw regenpijp afgekoppeld of wilt u dit gaan doen? = Ik wil dit ooit doen  
Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?  
(Meerdere antwoorden mogelijk) = Ik heb jaren geleden gedaan  
Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?  
(Meerdere antwoorden mogelijk) = Ik heb dit pas gedaan  
Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?  
(Meerdere antwoorden mogelijk) = Ik wil dit komend jaar doen  
Or Heeft u uw bestrating deels verwijderd of wilt u dit gaan doen?  
(Meerdere antwoorden mogelijk) = Ik wil dit ooit doen  
Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)  
= Ik heb dit jaren geleden gedaan  
Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)  
= Ik heb dit pas gedaan  
Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)  
= Ik wil dit komend jaar doen  
Or Heeft u een regenton of wilt u er één (extra) plaatsen? (Meerdere antwoorden mogelijk)  
= Ik wil dit ooit doen  
Or Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
= Ik heb dit jaren geleden gedaan  
Or Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
= Ik heb dit pas gedaan*

Or Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
= Ik wil dit komend jaar doen  
Or Heeft u een boom geplant of wilt u er één (extra) planten? (Meerdere antwoorden mogelijk)  
= Ik wil dit ooit doen  
Or Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik heb dit jaren geleden gedaan  
Or Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik heb dit pas gedaan  
Or Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik wil dit komend jaar doen  
Or Heeft u een groen dak geplaatst of wilt u dit gaan doen? = Ik wil dit ooit doen



#### M\_effects

Als u nadenkt over wat u heeft gedaan of wilt gaan doen, welke andere effecten denkt u dat dit zal hebben?

(Meerdere antwoorden mogelijk)

- Waardestijging van mijn huis (1)
- Mijn huis en/of tuin zien er mooier uit (4)
- Het wordt minder heet (5)
- Meer vogels en insecten (6)
- Geen effecten (7)
- Ik weet het niet (8)

SN\_injunctive Verwacht(en) uw familie, vrienden, buren of kennissen dat u zich voorbereidt op wateroverlast?

- Nee, helemaal niet (1)
- Een beetje (2)
- Ja, dat verwachten ze absoluut (5)
- Weet ik niet (6)

SN\_descriptive Hoeveel van uw familie, vrienden buren of kennissen hebben voorzorgsmaatregelen genomen tegen wateroverlast?

- Geen van hen (1)
- Enkele (1 tot 4) (2)
- Veel (5 of meer) (3)
- Weet ik niet (4)

End of Block: Deel 5: Eventuele voorzorgsmaatregelen - May 18, 2021

Start of Block: Finale vragen



Comments Heeft u nog vragen of opmerkingen over deze vragenlijst of het Stadsbeek project?

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Follow up Wilt u nog meer vragen beantwoorden?

- Nee (5)
- Ja, mijn e-mail adres of telefoonnummer is (6)

---

Results Wilt u horen wat de resultaten van dit onderzoek zijn? Wij publiceren de resultaten van dit project [hier](#). U kunt ook uw e-mail adres invullen:

- Mijn e-mail adres is (1)

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End of Block: Finale vragen



## Annex 4 – Answers decoupling rainwater pipes per street

	street	Ik heb dit jaren geleden gedaan	Ik heb dit pas gedaan	Ik wil dit komend jaar doen	Ik wil dit ooit doen	Nee	NA
1	B.W. ter Kuilestraat	NA	4	NA	1	1	3
2	Beukstraat	NA	NA	NA	3	2	NA
3	Dr. Lovinkstraat	NA	NA	NA	NA	NA	1
4	Dr. Van Hoekstraat	NA	1	NA	1	1	NA
5	Eikstraat	1	NA	2	1	NA	5
5	Elferinksweg	2	7	NA	NA	5	2
7	Esdoornstraat	NA	NA	1	NA	1	1
8	Goudenregenstraat	1	2	NA	2	NA	1
9	J.H.W. Robersstraat	NA	NA	NA	NA	1	NA
0	Josinkmorsplein	1	NA	NA	NA	NA	NA
1	Kastanjestraat	NA	NA	NA	1	2	1
2	Larixstraat	NA	NA	NA	NA	NA	1
3	Lindestraat	NA	NA	NA	NA	7	2
4	Plataanstraat	NA	NA	1	NA	NA	NA
5	Tweede Emmastraat	NA	1	NA	NA	1	NA
5	Vorstmanplantsoen	NA	NA	NA	1	NA	NA
7	Wethouder Nijhuisstraat	NA	NA	NA	1	NA	NA
8	Willem de Clercqstraat	NA	NA	NA	1	NA	NA
9	Zweringweg	2	NA	NA	1	1	2
0	NA	1	3	NA	1	1	2

