



BLUE MARBLE

Garden water usage

Understanding behaviour change

October 2022 [Updated version]





Background and objectives

Initial objectives:

Overarching aim: to learn more about garden water usage, with an emphasis on insights gathered during warm periods of weather

Key objectives:

- To understand to what extent hot weather affects water usage in the garden and in what ways
- To understand the drivers and barriers to behaviour change when it comes to water usage and how to overcome the barriers
- To help water companies develop tools, devices, messaging to enable customers to change behaviour



Additional objectives:

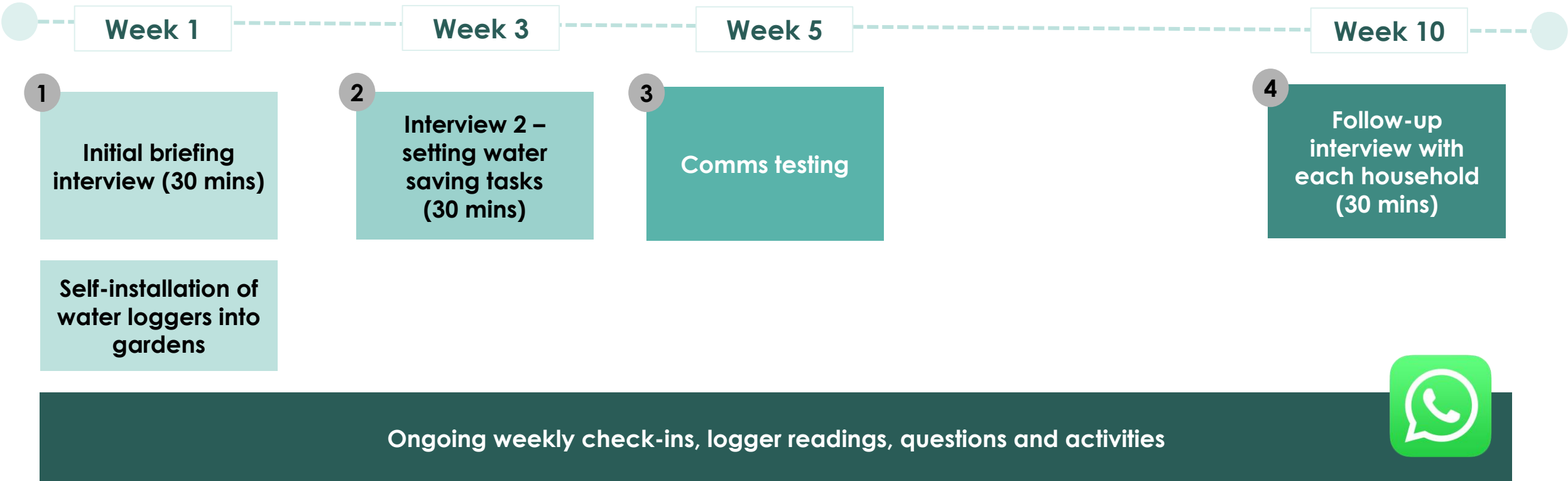
An opportunity arose to add to this ethnographic study and gather insight on living through a period of extreme heat and TUBs.

Key objectives:

- To gauge what customers understand TUBs and drought to mean
- To understand impact of the implementation of TUBs for those both inside and outside of ban regions
- To understand the effect that extreme weather has on garden water usage (and garden behaviour in general)



Methodology



Throughout the fieldwork period we asked questions surrounding the heatwave, implementation of TUBs and declarations of drought.



Who we spoke to...

We recruited customers from 3 x households from each of the following water companies:



Within our sample of 15 households (total) we included the following:

- Mix of household composition and life stage
- Mix of Socioeconomic grade and working status
- Mix of home-owners and renters
- Mix of urban and rural locations
- All to have a garden (mix of sizes) with outdoor tap
- Moderate-heavy outside water users
- High proportion (10/15) of regular gardeners

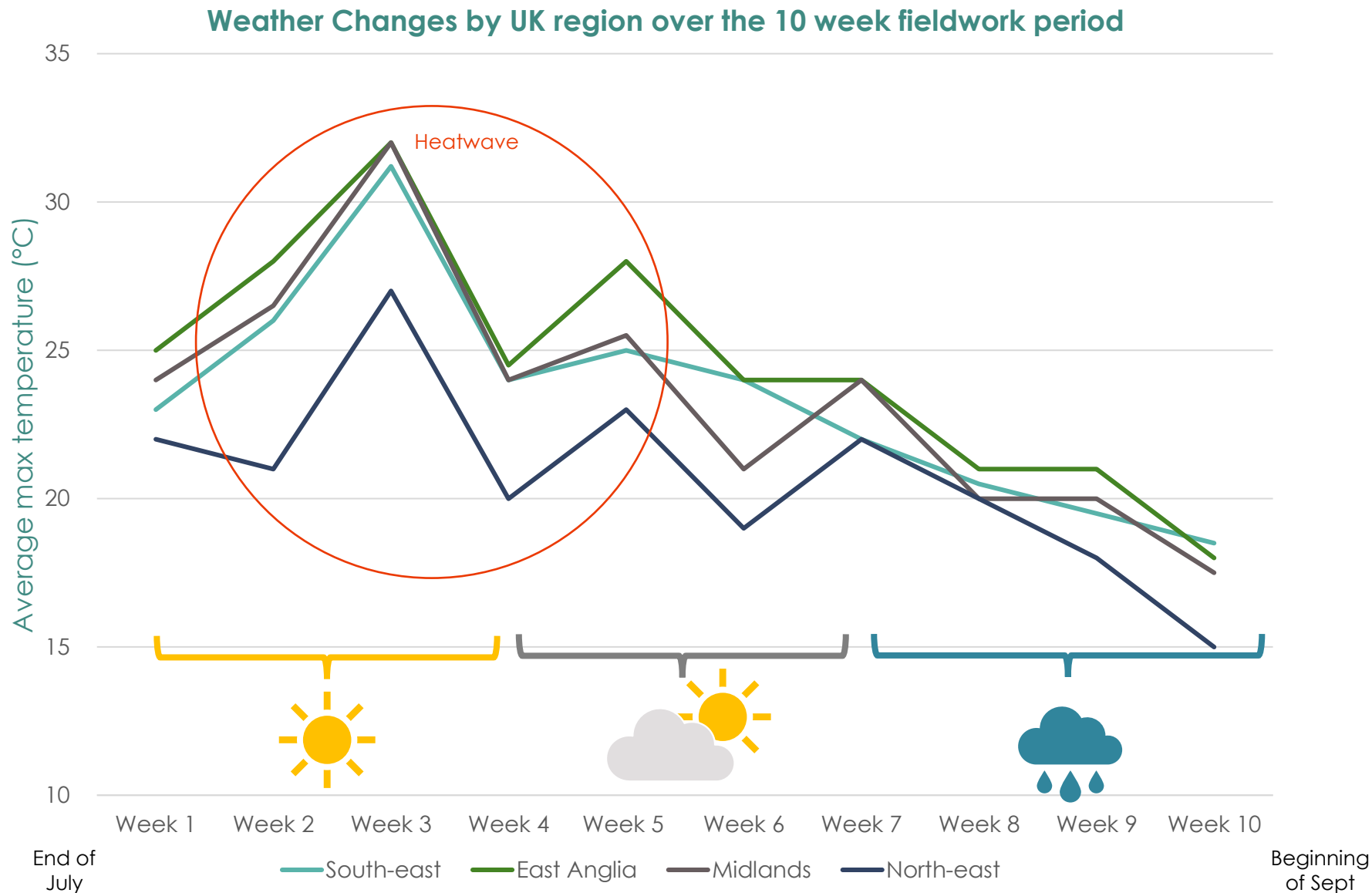
A note on sample size:

Given the exploratory, in-depth nature of the research, we prioritised depth over breadth. We wanted to understand participants' behaviours and attitudes in significant detail, over an extended period of time (10 weeks at the height of summer). Given the budgetary constraints within which we were operating, a sample size of 15 allowed us to recruit a good mix of household types (as outlined above) but also spend significant fieldwork and analysis time reviewing real-life behaviours in detail as the weather fluctuated. For a study of this complexity, length and depth, a sample size of 15 can be considered relatively large.



Overview of the weather we saw during the 10-week fieldwork period

The study ran from the end of July 2022 to the end of September 2022

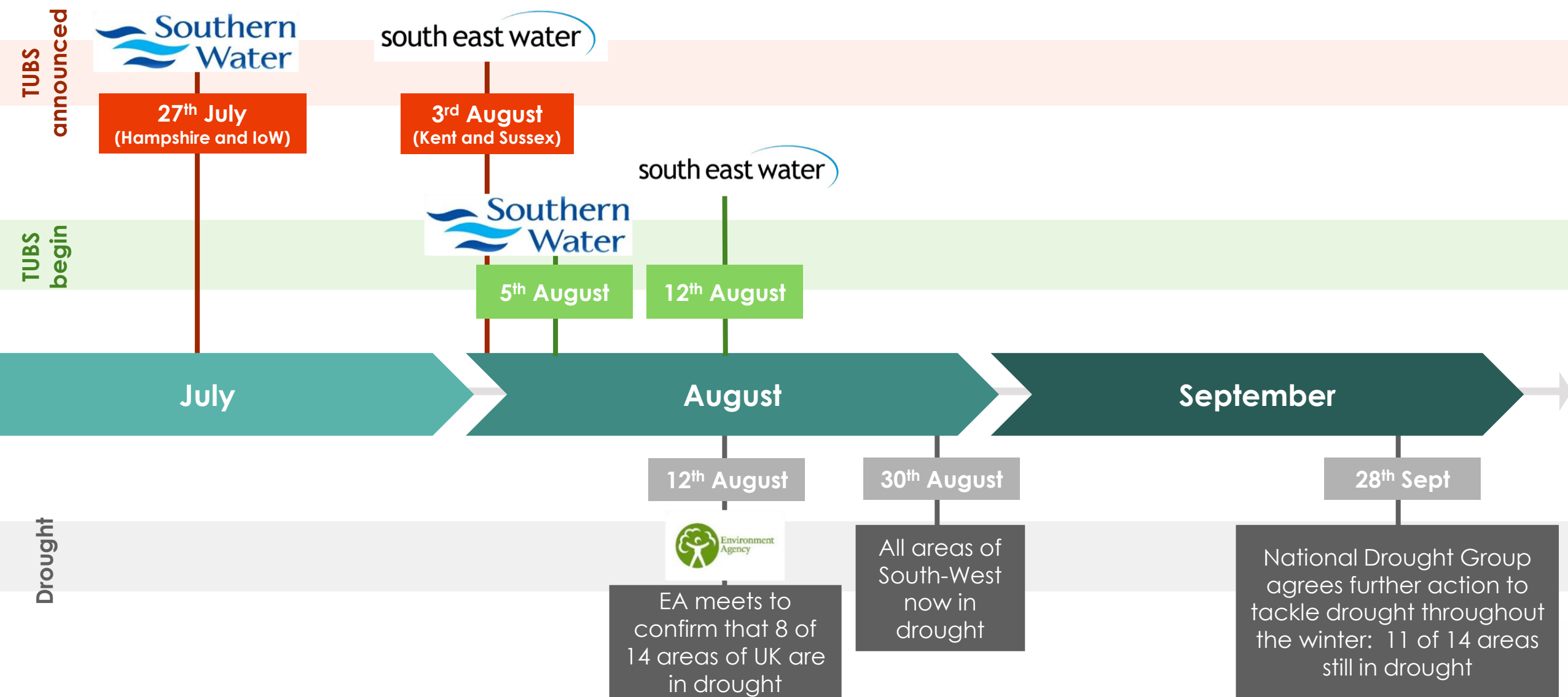


Average temperatures tended to be especially **higher in East Anglia** and **lower in the North-east**.

We saw warm weather from the beginning of the research right through until Week 7 which fell at the beginning of September.

Timeline of key milestones

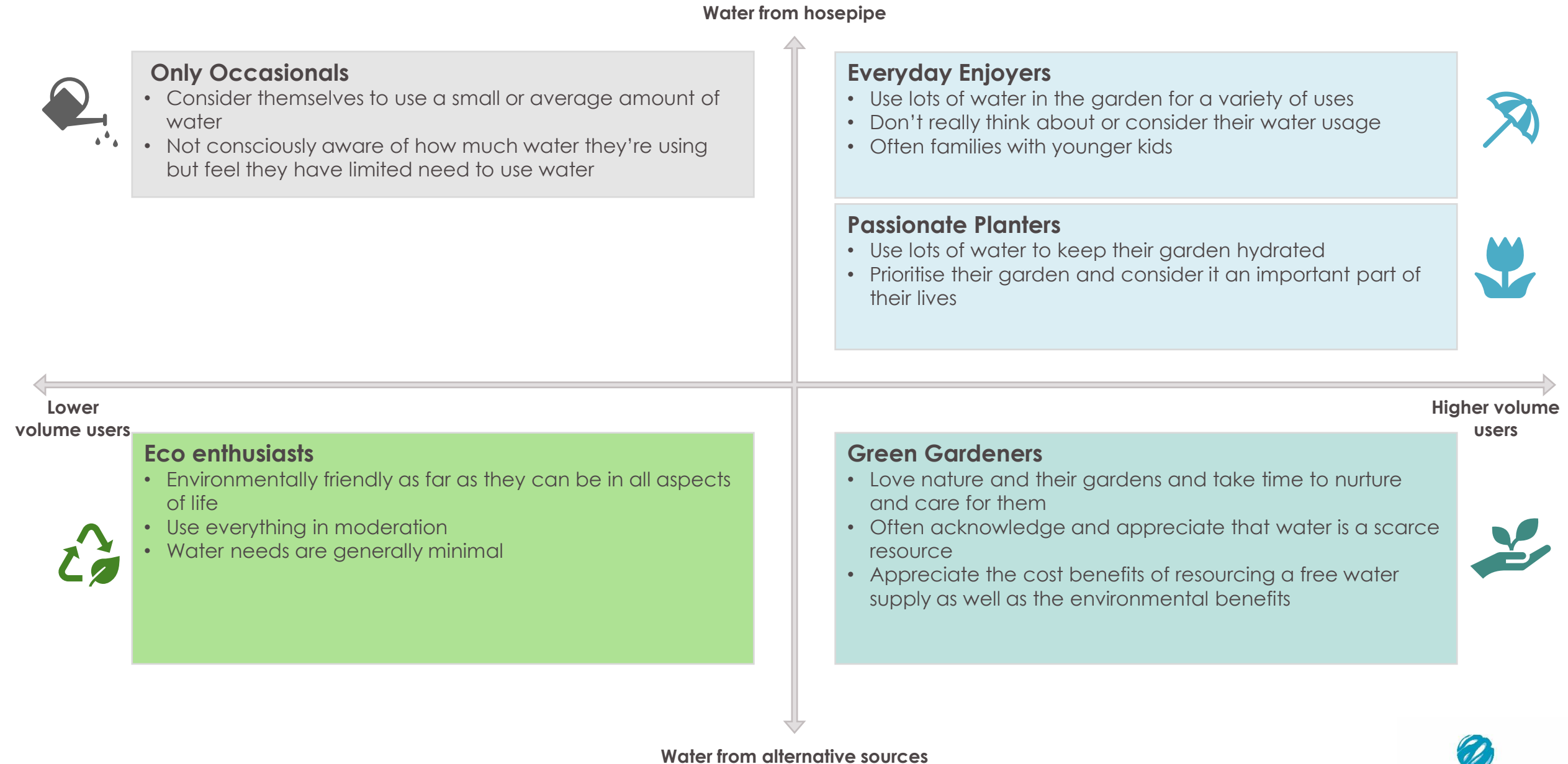
Implementation of TUBs and declarations of drought



Customer context



We identified 5 key garden water usage typologies



NB: these typologies are based on behaviours/attitudes observed from a small sample (not currently quantified)

How do our typologies use water in the garden?

Water from hosepipe



Only Occasionals

- Use water almost subconsciously as part of weekly habits
- Watering the garden or washing car
- Water usage tends to be considered 'non-essential' but don't really think about it

Everyday Enjoyers

- Filling up paddling pools/hot tubs during the summer
- Keeping things clean – washing cars, patio etc. with hose
- Watering the garden (pots/beds) with the hose



Passionate Planters

- Almost all water usage goes on the garden
- More likely to be a HH that waters the lawn
- Water the garden with hose or watering can (filled from hose) as it's more convenient



Lower volume users

Higher volume users



Eco enthusiasts

- Use collected water and recycle water for any outdoor water needs
- Minimal amounts used on garden if needed to keep the plants alive
- Will use a bucket to wash vehicles when needed

Green Gardeners

- Use a lot of water for the garden but will find alternative sources besides the hose such as:
 - Water butts
 - Recycled water
 - Collected water from pipes running off shed roofs etc.
 - Buckets left out in the rain



Water from alternative sources



Water saving

A photograph of a house exterior. A black downspout runs vertically down the side of a light-colored wall. To the left, a black pipe runs horizontally across the frame. A teal banner with the text 'Water saving' is overlaid on the image. The background shows a clear blue sky, a tiled roof, and lush green foliage.

Prior to this research project only 2 of our typologies were exhibiting regular, conscious water saving behaviours

Green Gardeners and Eco Enthusiasts are more likely to be conscious of their water usage, motivated by environmental benefits

Green Gardeners



- Motivated by their love for nature – they believe it is important to maintain their garden/keep it watered
- Likely to make an effort to collect and use water from rainfall; considered better for plants and better for the environment generally – a shame to waste a precious resource

Key behaviours:

- Installing multiple water butts
- Leaving buckets out to collect water
- Using a watering can rather than a hose
- Target watering for the plants that need it
- Gardens designed/planted to make the most of water and keep sensitive plants out of direct heat/sunlight

"I have 3 water butts and try to use those but prioritise plants that need the natural water. Use the tap for everything else, although I only water plants that really need it i.e. are new."

Green Gardener

Eco Enthusiasts



- Saving water is part of a wider effort to be frugal and use less of everything/be less wasteful
- When water is needed for e.g. washing or watering, more likely to use a vessel like a bucket or watering can to minimise the amount of water used for that activity

Key behaviours:

- Washing things with bucket and sponge
- Keeping water needs to a minimum
- Recycling water e.g. bath water on plants or business owner with food van uses water on plants or to wash dog

"My plants are things like lilies and fuchsias, they look after themselves and don't need a lot of watering. I don't regularly go out and water the garden. I do fill bird baths – every day when it's really hot."

Eco Enthusiast



We set our participants a task to save water over an 8-week period

We challenged participants to reduce the amount of water they use overall in the garden. We asked them to send us weekly logger readings to track their progress.

We provided a set of ideas and brainstormed other ways they could save water in the garden including:

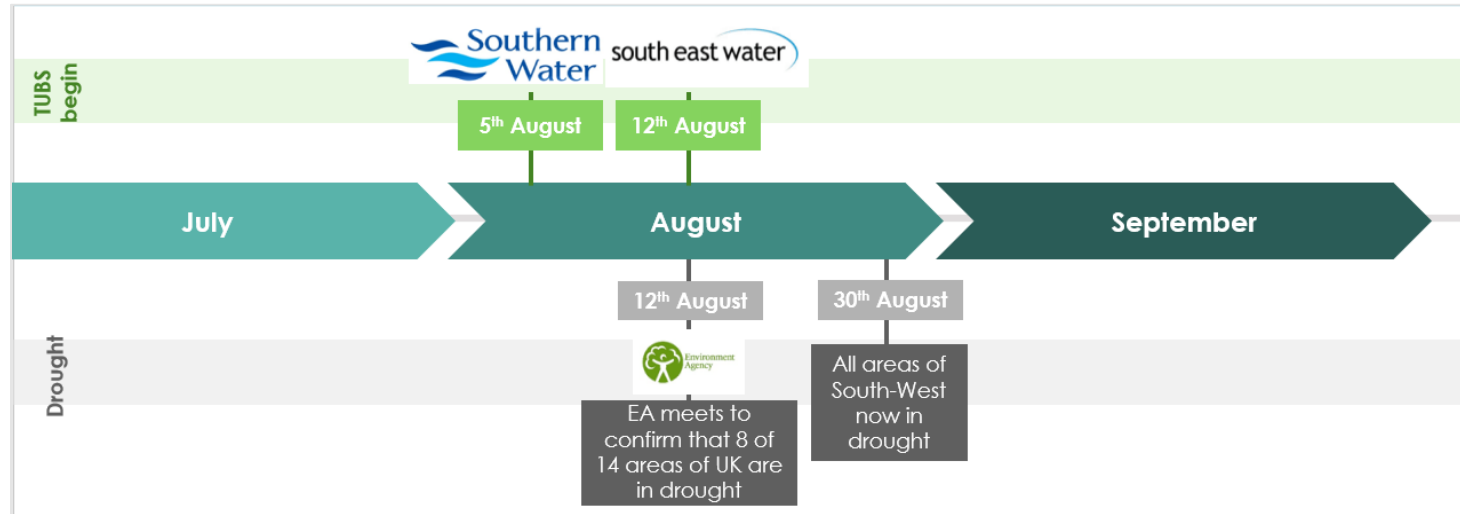


- Changing the **setting on the hosepipe** if you have a hose gun
- Watering the garden with a **watering can** instead of the hosepipe
- Adopting a **more efficient watering routine** (cooler time of day, watering roots instead of leaves)
- **Skipping parts of watering routine** if you feel your plants don't need it
- **Collecting rainwater** in the garden to water the plants or generally use in the garden
- Try to **avoid watering the lawn**
- **Reusing water from inside the house** to water the plants or for pets e.g. from:
 - The dehumidifier
 - The drier
 - Water from the tap or shower (when left to run to cool down/heat up)
- Using **bucket instead of hose** for cleaning things or washing the car
- **Maintaining water** e.g. in paddling pools or hot tubs with chlorine
- Getting **rid of bad habits** such as leaving the hose in flower beds or not turning the hose off between areas



We adapted the project plan to reflect the changes in weather

Those under TUBs were unable to trial many of the water saving behaviours



17-19th July UK Health Security Agency issues **red** health warning for heatwave. Highs of over **40 degrees** recorded.








9-15th August UK Health Security Agency issues **amber** health warning for heatwave. Highs of over **34 degrees** recorded.

We adapted the objectives of this project to focus on water saving in the context of TUBs, droughts and the heatwave.



Plans for how to save water through behaviour change

NB: some were prevented from trialling behaviours due to TUBs

	Attitudes towards water saving	Planned behaviours
 Only Occasionals	As low water users, this typology struggle to think of ways to reduce their water usage – not much else they can do	<ul style="list-style-type: none">• Unsure what they can do• Struggle to recall their garden water usage behaviour and therefore need to adapt as they use
 Everyday Enjoyers	Using water in the garden is part of their day-to-day habits; for them, it's more about cutting down rather than cutting out	<ul style="list-style-type: none">• Find alternative ways of doing things e.g. wash the car with a bucket rather than a hose
 Passionate Planters	These households are reluctant to sacrifice the health of their garden for the sake of saving water	<ul style="list-style-type: none">• Reduce water used outside for things <u>other than the plants</u>• Water garden more carefully to avoid wastage between plants
 Eco enthusiasts	As another low water usage typology, they struggle to think of what they can do to save; but the environmental factor does motivate them to try new things and go the extra mile	<ul style="list-style-type: none">• Use their experience of finding creative solutions to being more eco-friendly, and apply this to water usage
 Green Gardeners	Already conscious of their water usage, Green Gardeners are willing to try hard and invest in making changes, but also feel there's not much more they can do	<ul style="list-style-type: none">• Find additional ways to reuse and recycle water for their gardens• Be more targeted about watering the plants that really need it

Customers across all typologies struggle to determine which behaviour changes will be most successful, i.e. result in the biggest decrease in water consumption, and what the **impact** of that water saving will be – both environmentally and financially

How did they manage with water saving behaviours in reality?



Successes



Only Occasionals

- **Logger increased awareness of usage and volumes consumed**
- More conscious/careful usage as well as adopting recycling behaviours and targeted watering



Everyday Enjoyers

- **Seeing how much they use was impactful and motivated them to find workarounds** e.g. not letting hose run, washing with bucket



Passionate Planters

- **Behaviour change in the form of small swaps** e.g. using the watering can rather than hose and collecting rainwater to supplement watering



Eco enthusiasts

- **Recycling water from inside the home to carry out activities** such as using leftover water to wash the car or the dog










Green Gardeners

- **Finding innovative ways to collect rainwater for their gardens** such as connecting pipes to rooves to feed into water butts
- Being stricter with targeted watering



Households feel a **sense of achievement** when they reuse or save water in some way; but this is not always enough of a motivation to maintain a behaviour in the long-term

Each typology faced a different set of challenges, and require a tailored approach to help them to save water

	 Challenges	 Recommendations
 Only Occasionals	<ul style="list-style-type: none">• Unsure what else to do• Unaware of their usage	<ul style="list-style-type: none">• Provide examples of how to cut down water use in the garden• Educate on how much water is used for day to day tasks• Target water usage inside the house
 Everyday Enjoyers	<ul style="list-style-type: none">• Motivation to reduce water usage is limited as they're reluctant to make sacrifices	<ul style="list-style-type: none">• Provide 'easy ways to save' that require minimal effort or are 'fit and forget'
 Passionate Planters	<ul style="list-style-type: none">• Cutting down on how much water they give their plants is unrealistic as it's too important for them	<ul style="list-style-type: none">• Educate on ways to source water naturally or ways to hydrate their plants more efficiently
 Eco enthusiasts	<ul style="list-style-type: none">• Limited challenges for this group	<ul style="list-style-type: none">• Encourage them to continue as they are!
 Green Gardeners	<ul style="list-style-type: none">• Reluctant to put water saving above other environmental factors such as plants/nature/wildlife	<ul style="list-style-type: none">• Help them to learn more about efficient ways to garden to change their watering routines in the long-term



Water loggers

Total 1

3003.0

Liter



We provided a water logger to each participants and asked for weekly updates over 10 weeks



We sent all respondents a water logger attachment for their outdoor taps and asked them to set it up

- We asked them to send us a water logger reading each week and tell us what they had done in the garden that week and how they'd used water
- For the first two weeks of research we allowed respondents to use water as normal and provide readings
- We then introduced the task where we asked respondents to reduce the amount of water they use in the garden for the following 8 weeks
- NB: respondents in a TUB area were not set tasks, but asked to provide regular updates of how they're coping without use of their hosepipe



How did loggers affect behaviour?

Most respondents found having the loggers interesting and reported an increased awareness of their water usage as a result

The data from the loggers revealed how much water is used carrying out different activities and for many the results were eye-opening

- Respondents struggle to estimate the volume of water needed to carry out a task, however once shown they were surprised at how many litres were used

Though we can't claim that loggers alone affected water usage behaviour, we can see that they contributed to the desire to reduce water used:

- **Increased consciousness and desire to use less water came from variety of sources** including water loggers, hot summer weather, drought announcement and TUBs (even for those unaffected by bans)
- **Some respondents, such as Passionate Planters, opted for easy wins** such as not watering the lawn after seeing how much it uses
- **Others, especially Only Occasional, were willing to put in more effort/do more arduous tasks such as** swapping to a bucket instead of the hose for cleaning and using a watering can rather than the hosepipe

"I found the water logger really helpful because you don't realise how much water you're using just watering the plants or washing the car."

Everyday Enjoyer



"I was surprised, it was close to 100 litres in one go. I didn't begin to think I'd use that for watering the garden. It's been a real eye-opener to see how much water we actually use."

Only Occasional

?

Quantifying water

- Litres universally recognised used unit, but visualising large quantities of water in litres is difficult for most
- Examples and comparisons to other people also helpful – e.g., the average person uses X litres per week to water their garden



How can water loggers help motivate customers to save water?

Loggers raise awareness of water usage, but alone cannot change behaviours.



Benefits:

- Allows people to see just how many litres of water they are using when they use water in the garden
- Especially effective for activities that seem 'small' but tend to use more water than expected, e.g. washing something for a few minutes
- Having something on the tap is an active reminder to be conscious of how much water is being used and can lead to more considered behaviour
- Helps people learn which behaviours are more water efficient and which ones are less

"I was surprised, it was close to 100 litres in one go. I didn't even begin to envisage I would use that amount for watering the garden. It's been a real eye-opener for me to how much water we actually use."

Only Occasional



Downsides:

- For some, knowledge of how much they are using is not impactful enough to prevent them from carrying out behaviours – e.g., people who want to fill up their paddling pool will do so (often, Everyday Enjoyers)
- For some, the device is easy to ignore or forget about
- Difficult to determine how water efficient you're being – need a benchmark of average litres of water used
- Being aware of how much you're using not always enough to encourage a long-term change in behaviour

"I found the water logger really helpful because you don't realise how much water you're using just watering the plants or washing the car."

Everyday Enjoyer

"I saw them but they're just hard to quantify. The numbers haven't got a meaning to me in terms of actual water coming out of the hosepipe."

Passionate Planter





Awareness of water scarcity

Our sample began the fieldwork with a range of awareness about UK water scarcity issues NB: prior to long period of hot weather

Some HHs demonstrated a complete lack of awareness:

Felt drought was an issue faced by hotter and drier countries than the UK

"It's something I considered more a foreign issue."

Passionate Planter

Most had vague awareness that saving water both inside and outside the home was morally desirable

Respondents recall:

- Being taught about water saving at school
- Water shortage during the 1970s
- Experiences abroad in countries prone to drought

"Although only young, I do remember the summer of 1976 and in subsequent years, did do about the drought within school learning, so, always been aware."

Only Occasional

Eco Enthusiasts and Green Gardeners demonstrated strongest understanding of water resource issues

Very knowledgeable about environmental issues; part of their wider knowledge that comes with being well-versed in all things related to the environment

"I'm pretty careful with my water usage anyway, due to costs plus environmental concerns."

Green Gardener

Little awareness

Moderate awareness

Significant awareness



Though not motivated by water scarcity, customers with water meters were aware that saving water would positively impact their bills. The cost of living crisis has resulted in scrutiny of all bills; even water which is often the least expensive.

"In the current climate, any saving goes a long way."

Green Gardener



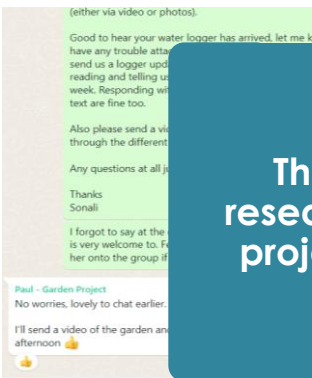
A variety of factors influenced awareness of water resources during research period



Hosepipe bans

- Media coverage and/or direct experience of **TUBs** immediately drew attention to the need to conserve water
- People assume TUBs are implemented due to extremely hot and dry conditions during the summer heatwave, rather than longer-term water resource problems
- **Eco-enthusiasts** and **Green Gardeners** were less likely to view the heatwave as a one-off event, highlighting the importance of conserving water to avoid TUBs and droughts reoccurring

"The weather has made me think more strategically around water...I am... far more aware of the issues now and am fearful that this [the hosepipe ban] will be a yearly occurrence going forward."
Green Gardener



The research project

- Tasks set during the course of the fieldwork also prompted respondents to find out more about how the water system works, and the problems faced by water companies
- In addition to the tasks we set them, many respondents also spontaneously tried to reduce their water use inside the home:
 - Limiting the length of showers
 - Making sure dishwashers and washing machines were full before using

"This exercise has been good in that it had opened my eyes again to water usage. I do find myself saying more often to limit shower time etc."
Only Occasional



Drought

- Most were unaffected by news of **drought**, with the majority not really understanding what this means beyond hot weather and limited rainfall



Impact of heatwave



How did behaviours and attitudes change during periods of hot weather?

Prior to interventions (TUBs and water saving tasks), most reported using more water during periods of hot weather.



Extremely hot and dry weather raised awareness of water usage and resource:

- Seeing parks and fields completely brown and dry, learning about wildfires and record breaking temperatures contributed to awareness of water scarcity
 - Particularly the case for those living in the most affected regions in the South of England
 - Less impactful for those living in the Midlands and North of England
- The media played an influential role with water resource and related topics featuring heavily in mainstream news during summer

Despite reporting greater awareness of water resource, for many, hot weather meant an increase in water usage

Most changed behaviour during the start of the hot weather, resulting in increased water usage:

- Adopting weather-specific, water-intensive behaviours (Everyday Enjoyers):
 - Paddling pools
 - Cleaning decking / patios (for summer)
 - Cooling down pets
- Increasing the frequency and intensity of already existing behaviours:
 - Watering gardens (using sprinklers and hoses)

"With the hot weather I've been desperately out there watering all the time."

Passionate Planter

"I've been cleaning and filling the paddling pool and washing the windows."

Everyday Enjoyer

"When it was at the peak of the heatwave, I was watering twice a day: first thing in the morning and in the evening." **Only Occasional**



The hot weather impacted gardens and water behaviours

Most gardens were negatively affected by the extended hot and dry weather

- Gardeners were upset to see parts of their garden dying despite efforts to keep them alive (esp. Passionate Planters)
- **Others were more willing to let things go** – especially given the amount of water required to keep them alive
- Being under **TUBs affected the degree to which respondents could keep their gardens alive**

Passionate Planters and Green Gardeners, in particular, developed water efficient gardening behaviours to help maintain some parts of their gardens such as:

- **Prioritising plants that needed more water** and leaving those that either wouldn't survive or could survive with little water
- Making a more conscious effort to collect recycled water
- **Moving vulnerable plants to cooler areas** of garden



"I thought the garden was going to be a blaze of colour this year."
Only Occasional

"The garden fared really, really, really badly, I only watered the lilies."
Eco Enthusiast

"There's been just not enough water. It's just a fruitless exercise to just keep watering."
Only Occasional

With autumn and the arrival of rain, people were surprised and pleased at how quickly their gardens returned to normal:

- Brown lawns going green after a few weeks of rain was a welcome surprise for many
- Reports of late flowers emerging with the rain
- Reports of late fruit and vegetable harvests with rain

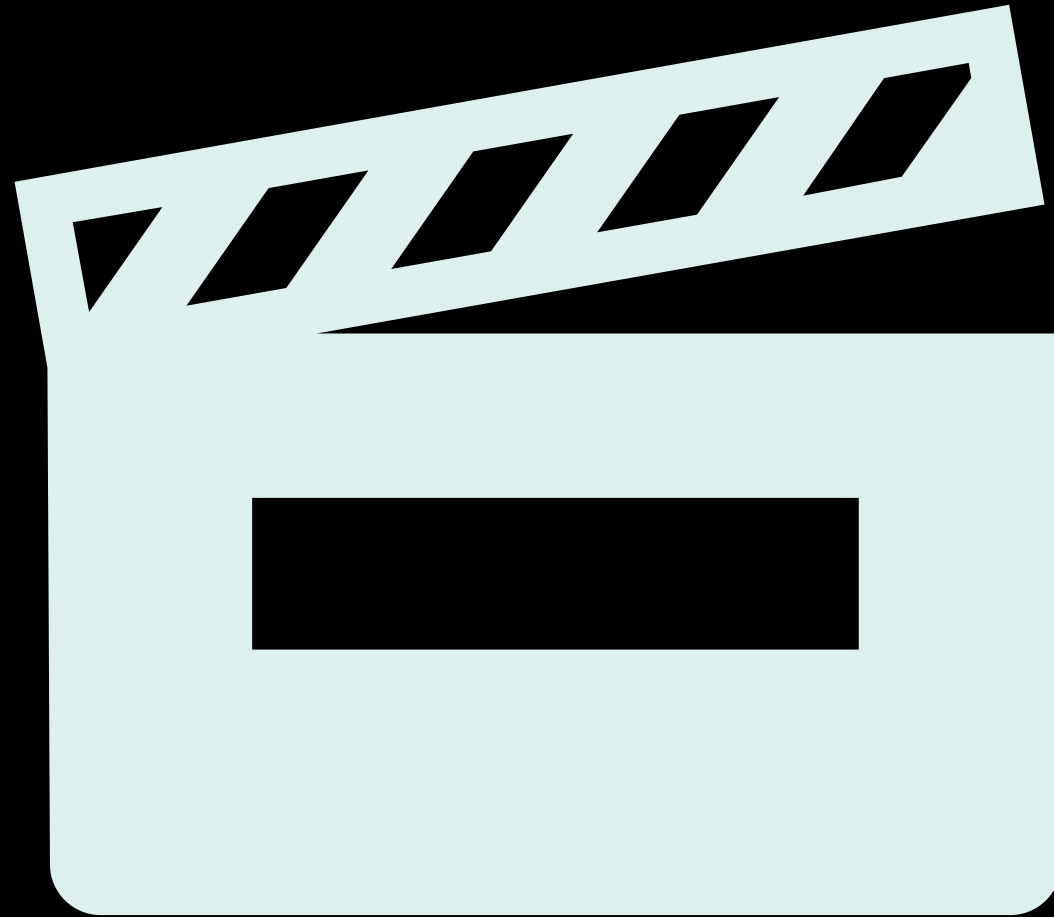
Opportunity here for water companies to communicate this early on in future heatwave events to help discourage excessive water usage

"It actually fared quite well. I don't think anything really died."
Everyday Enjoyer

"Majority of garden was okay – we just gave it a bit more attention with the watering. We devoted extra care to it and did a good job in the end."
Passionate Planter



In their own words...VIDEO: How did gardens survive the heatwaves of summer 2022?



TUBs and drought



The majority of people affected by TUBs knew what the rules were...

...and most followed them exactly.



How did people hear about the bans?

- Social media and legacy media (radio, newspapers, TV)
- Letters / email from water company
- Some respondents located in the South and nearby, but not in areas under TUBs, heard about bans through social or legacy media and erroneously believed themselves affected: 1 Southern Water customer not in Southern Water TUB area (initially, before they checked), 2 Portsmouth Water customers



Awareness of rules

- Majority of those under TUBs understood how the rules affected them
- Limited awareness (and curiosity!) as to how businesses were affected – several believed the same rules applied to all
- Some thought that as soon as the TUB was announced it came into force



How did bans affect them?

- Water-frivolous typologies are more affected than those using less water – forced to cut back on filling up paddling pools and watering gardens, washing cars, or cleaning patios with hose
- Conversely, Only Occasionals reported not being affected too much by TUBs – not using hose only a small change in behaviour and use of water



Levels of compliance with bans

- Majority of those affected complied with the ban – and reported that it was easy to do so on a practical level
- Some frustrated that they couldn't use water as they wished – particularly for activities such as filling paddling pools, washing the car, or cleaning the patio
- One respondent broke the ban – to water their garden with a hose when they considered it absolutely necessary to avoid plants dying

"I just dealt with it, I got on with it - I haven't had to do much."

Passionate Planter

"The messaging wasn't very clear until you dug into it really."

Passionate Planter

"It's a balance of when to save your plants with a bit of water, and most of the time just leaving it. I was looking for signs of dying before watering. I was walking around having a look, rather than walking around and watering. When something was going to die I watered it, and broke the rules a bit."

Passionate Planter



People are understanding when it comes to TUBs, especially during hot and dry weather

Acquiescence to TUBs during hot and dry weather

- **Broad-based support for TUBs during prolonged periods of hot and dry weather** (for both affected and unaffected)
- For those affected, **understandable that TUBs implemented:**
 - Extremely hot and dry summer – experienced and seen
 - Seen / heard about low reservoirs in media
 - **Some surprised at not being under TUB** especially if surrounded by TUB areas
- Most think TUBs in place due to low levels of water in reservoirs principally a result of hot and dry weather over the summer; few thought it was due to lower levels of rainfall over a longer period of time

Following a period of rain, there is confusion around what this means for TUBs

- **Some believe that TUBs are no longer in force** with the cooler, wetter weather – **assumption that with rainfall reservoirs are at healthy levels**
- **Following rainfall TUBs don't make sense** and no longer seem necessary
- However, desire to use hose has declined with the wetter weather and therefore TUBs are much less likely to affect behaviour

A few HHs instigated a voluntary TUB

- Aware that weather was especially hot and decided to impose personal restriction
- Motivations:
 - Environmental altruism
 - Peer pressure (not wanting to be seen wasting water by neighbours)
 - View of region specific TUBs as illogical: “if I live in a dry area, I should be reducing my usage”



Based on response from our sample, **TUBs could have been introduced earlier this summer with high levels of compliance:** many anticipated TUBs due to the hot and dry weather and understood and accepted them being implemented.

Many believe TUBs will be implemented more frequently with hot and dry summers becoming more likely with global warming.

Some would support more regular implementation of TUBs if necessary to protect water resources during hot spells.

Others would be unhappy to see more regular TUBs in future as they believe the water company are responsible for managing water resource without implementing restrictions on households.



There is little understanding of the implications of drought

Whilst it raises awareness around water scarcity, it does little to change behaviours

Little understanding of what drought announcement means

- Limited understanding in terms of water resource and water companies – **most don't know the negative impact of drought on local environment**
- Perception that declaring drought means more for the water company/ country rather than consumers behaviour
- The term '**drought**' reinforces that it is and has been very dry and hot and holds little additional meaning
- **Some confused that drought has been declared in their area but they are not under a TUB**

Drought announcement does little to influence behaviours or attitudes

- Authorities announcing a drought illustrates that **the dry and hot summer is a serious issue** and **raises awareness around water resource**
- However, **announcement does not tell people that they need to change behaviours**

"I have heard that a drought has been declared and I think it's confusing. Wessex Water still has no hosepipe ban in place as apparently the reservoirs are well stocked. And today it's forecast to start chucking it down."

Green Gardener

"It's not a surprise they've announced a drought after the heatwaves we've been having recently. I think it's an example of how the climate is changing at a rapid pace. Bans will probably be a regular occurrence in the future."

Passionate Planter

"I think it makes sense to state it is a drought. It's incredibly dry everywhere and we are desperate for rain. My understanding is that water is hard to come by and should be used sparingly."

Everyday Enjoyer



Communications



We sent out a few pieces of comms to gauge an instinctive reaction

On week 5 of the research, we sent out one piece of communications per household and asked respondents to share their thoughts

Comms were gathered from websites and social media posts



We asked...

“How useful is this communication?”

“Where would you expect to see something like this?”

“Is this something you’d normally pay attention to?”

“Is it important that companies send out communications like this?”



Southern Water ✓
10 August at 10:15 · 🌐

Thank you for helping to #ReduceYourUse during the hot weather. Your support is vital to keep taps flowing in your neighbourhood.

High demand while it's hot means we've seen water use rise by millions of litres more a day, and because we've had no rain our network is under pressure.

Here's how July was looking, and take a look at ways you can help make a real difference here: <http://ow.ly/5gb750KgZ8G>

Metric	Value	Comparison
Rainfall	Only 7.95% of the average amount for July.	Average for July: 50.3mm July 2022: 4.0mm
Demand	12.3% more than the 2021 daily average.	9.03% more in July 2022 than July 2021
Supply	12.2% more than the 2021 daily average.	8.86% more in July 2022 than July 2021

6947_08/22



Easy to understand the basic principle that “rainfall is down and usage is up”



Doesn't clarify the length of TUB (assumes indefinitely/until water supplies recover)



No information about drought, TUBs or guidance to encourage behaviour change

“I do not think drought has been explained or that the picture clearly shows a drought or makes me aware it is showing one.”

Everyday Enjoyer

“The communication provides info only in my opinion. It does not give you anything else really.” **Only Occasional**



Comms testing: Southern Water

TUBs Announcement for Hampshire and the Isle of Wight on Facebook

Hot weather and low rainfall mean water supplies are low.

From today we're asking customers in Hampshire and on the Isle of Wight to only use what they need and avoid using hosepipes and sprinklers to protect supplies and local rivers.

To find out more about it, and whether this affects you, visit:

<http://ow.ly/AfLH50Kchzj+>

Thank you to everyone for reducing your use wherever you are in the region - every drop saved makes a difference.



Appeals to people's better nature to "help out" with the ban rather than enforcing with fines

Images of elderly people and children make communication feel "personal"



Use of word "avoid" generates confusion about desirable hosepipe use



Doesn't explain what a TUB is

Doesn't clarify which areas are affected upfront (you need to click a link)

"Doesn't explain what a hosepipe ban is at all."

Passionate Planter

"It says 'avoid' using, not 'you must not use'. The language isn't very clear."

Passionate Planter



Comms testing: Portsmouth Water

Water Resource Update July on Twitter

 **Portsmouth Water** @PortsmouthWater · Jul 29

No hosepipe ban for us yet, but we are appealing to our customers to use water wisely. Groundwater levels are below average due to the hot weather and the low rainfall we have seen this year. For more water saving advice visit our website portsmouthwater.co.uk/environment/sa...

WATER RESOURCE UPDATE: JULY

Rainfall

1.9mm IN JULY
BELOW AVERAGE

for this time of year.
Average for July is 48.7mm

Month	Rainfall (mm)
MAY	58.4mm
JUNE	44.2mm
JULY	1.9mm

Demand in July was...

MUCH HIGHER
than normal.



Groundwater

BELOW AVERAGE
for this time of year



Summer Advice

HIGH DEMAND

Put away your hose and sprinklers and let your lawn go brown.





Images demonstrate each point well



Same points repeated twice



Text is quite small in comparison to the images
Actionable points aren't immediately obvious

"Overall, the post makes the reader aware that there is a problem but the advice on doing your bit to help is quite hidden."

Green Gardener



Comms testing: Portsmouth Water

Watering routine guidance on Twitter



Very clear and simple

Gives more unusual tips that people may not have heard of before



Could contain a graphic relating to collecting running water, so that readers don't skim past this information

"I hadn't thought of collecting water while it's heating up and think I will do this going forward as ours takes around 30 seconds to kick in."

Green Gardener

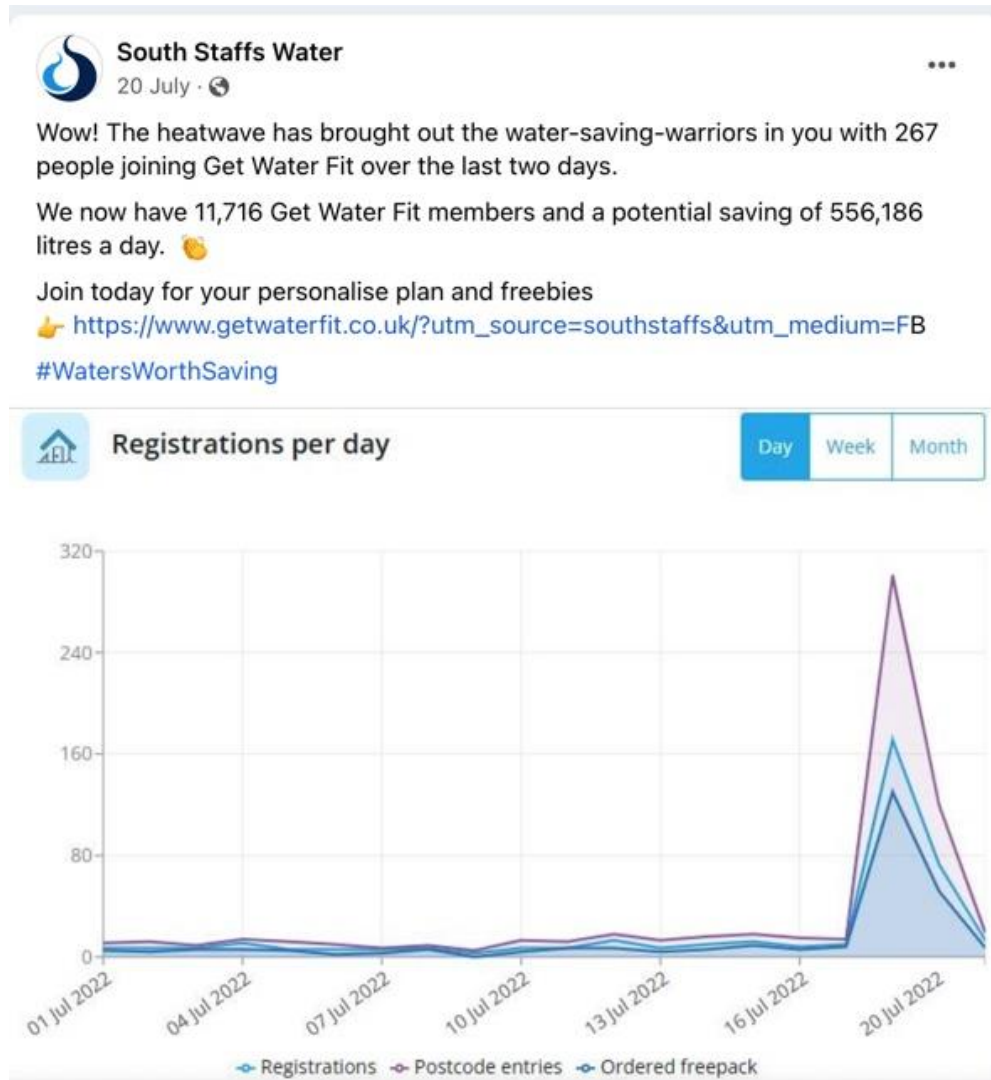
"I feel this is a good tip for most people. It's nice and clear."

Green Gardener



Comms testing: South Staffs Water

Get Water Fit update on Facebook



Very clear

Statistics illustrate how effective the scheme is



Could clearly state how saving water also saves money e.g. cost per litre

"Love that they have this initiative and so many have joined."

Eco Enthusiast

"It's clear and I like the stats."

Eco Enthusiast



Comms testing: Cambridge Water

Reusing paddling pool water Facebook post



Could show ways of reusing pool water e.g. watering plants, washing dog

Could show cost of filling up a paddling pool

Could have title "way to reuse water when you're done" to prevent readers skimming past the text underneath (detailing desirable behaviour change)

"If they emailed me or I saw an advert on social media I would pay attention to it as [reusing water is] something we're considering anyway."


Everyday Enjoyer

"Would be good to see kids watering plants with the pool water rather than just tipping it on themselves, to make it obvious to the reader!"

Eco Enthusiast



Water demand levels Facebook post

 **South East Water** 10 August at 15:01 · 🌐

Water demand levels in Kent and Sussex reached record highs in July. Last month Kent saw the driest conditions since records began in 1836 and Sussex experienced the lowest rainfall since 1911.

We've been producing an extra 120 million litres of drinking water a day to meet the exceptional demand. This is equivalent to supplying four towns the size of Maidstone or Eastbourne.

There are six million joints across our network of pipes which have to withstand high pressure 24 hours a day, seven days a week. Inevitably sometimes these pipes and joints fail unexpectedly, but we work around the clock to repair them as quickly as possible.

We've been working hard to reduce the number of leaks in our network, which are at an all-time low across our region. We've also got more teams into the area to spot leaks and speed up repairs. Since the beginning of May, we have fixed 10,647 leaks across our region.

We've also moved our customers in the West to red status and we are asking you to use water for essential use only.

Thank you to everyone who has been mindful of their water use – we must continue to ensure there is enough water for everyone. And please continue to tell us if you spot a leak while you're out and about by using the 'report a leak' button on our website.

For more information on restrictions, exemptions and FAQs, please visit our website: <https://orlo.uk/6GzQj>

#SouthEastWater 🌊 #TUBs



Easy to understand: increased demand, decreased rainfall and increased water production and the impact of leakage



Easy to understand the impact of leakage and measures taken to reduce it



Doesn't have a clear link to or explanation of drought

Doesn't focus enough on desirable behaviour change

"I do not think drought has been explained or that the picture clearly shows a drought or makes me aware it is showing one."

Everyday Enjoyer

"Although they recognise this is a problem and have encouraged people to help fix the issue, maybe more needs to be done to prevent and stop the leaking!"

Everyday Enjoyer



Comms testing: Northumbrian Water

August update on Facebook



Northumbrian Water

2 August at 12:23 · 🌐



We're at the start of a new month! 🌞

And good news - we're expecting to see these lovely sunny conditions continuing through most of August 🌞

And while we have seen a lot of talk in the news about hosepipe bans in some parts of the country, our reservoirs remain at healthy levels for this time of year and we are not currently anticipating any restrictions this summer 🌻

That doesn't mean to say that we aren't experiencing a dry and hot period of weather, which usually brings with it some very high water demand.

That's why we're asking for your help to use water wisely where you can, even if it involves making the smallest changes!

Because well, every drop really does count 💙💧

[Northumberland County Council](#), [North Tyneside Council](#), [Newcastle City Council](#), [Gateshead Council](#), [South Tyneside Council](#), [Sunderland, UK](#), [Durham County Council](#), [Stockton-on-Tees Borough Council](#), [Hartlepool Borough Council](#), [Darlington Borough Council](#), [Middlesbrough Council](#), [Redcar & Cleveland Borough Council](#)



Upbeat and friendly (“not condescending”): this encourages behaviour change

“I think it would make me think it's important to consider what I might do differently to ‘help’ without feeling stressed about the situation.”

Passionate Planter

“It has a better ‘tone’ than news reporting which tends to be scaremongering.”

Passionate Planter



Channels and reach

- Generally, though communications are out there on websites, leaflets and social media, they are being missed by customers
- Those who do see messages on social media are likely to already be engaged in the topic
- Ideas for getting the messages seen include: public toilets, car washes, shops, parish magazines – especially when the circumstances are urgent
- Some are sceptical of social media posts and would prefer urgent/serious messages to be delivered more formally via letter or email

Advice on water efficiency

- Customers respond well to clear advice aided by visuals to help them change behaviour
- Educate customers as to how water resource works and why bans and drought do not disappear as soon as the weather changes; this helps to motivate and maintain water saving behaviours
- Tangible examples of how much can be saved (in litres and £s) are motivating

Comms on drought, TUBs and water resource

- As well as a clear explanation of what these are, customers want information and advice around what should be done
- If informing of a TUB, include a clear illustrated map of who is and isn't affected
- Those not in TUB areas want formal confirmation that they are not affected





Key recommendations

Key insights

- 1. We identified 5 key typologies that exhibit water usage in the garden:**
 - Only Occasionals
 - Everyday Enjoyers
 - Passionate Planters
 - Eco Enthusiasts
 - Green Gardeners
- 2. Passionate Planters and Everyday Enjoyers struggled the most** to reduce their water usage. They **lacked motivation** to do so as they were not willing to make sacrifices (for their plants and for their habitual activities, respectively).
- 3. Water loggers provide customers with (often surprising) insight** as to how much water they use to carry out activities. Though we can't claim that loggers alone affected water usage behaviour, we can see that **they contributed to the desire to reduce the amount of water used.**
 - Comparisons or examples of average usage would help customers 'benchmark' their usage and provide them with something to aim for e.g. washing the car takes 20 litres on average etc.
- 4. TUBs contribute to increased awareness of water scarcity** as a whole; media coverage and direct experience of being under a TUB drew attention to the need to conserve water.
- 5. The heatwave contributed to an overall increase in awareness of the realities of climate change** and the increased chances of hot weather and TUBs in the future.
- 6. Though there is understanding as to why TUBs are put in place, customers feel some advanced warning and guidance around preserving water** from their water companies could have **prevented or lessened the extent of the bans.**
- 7. There is a desire for more active communication from water companies** during periods of heatwave, TUBs and drought, especially for those not under a ban.
- 8. Understanding of the 'bigger picture' around TUBs and drought is not well understood; customers do not understand why bans are still in place after the heat has died down** and it has started raining again.
- 9. Households were surprised and delighted to see much of their garden survived the heatwave, even without watering. It's worth considering communicating this message pre-summer to discourage 'panic-watering'.**



Appendix: research materials

Interview 1 (week 1 of 10): discussion guide



Garden Water Understanding behaviour change Discussion Guide – Interview 1 (Week 1 of 10) (30 mins)

Introduce self and purpose of project: "Blue Marble is an independent market research agency commissioned by a group of organisations to learn about people's lifestyles and behaviours around the home – specifically looking at life in the garden during the summer months. This is a really exciting project, so we are happy to have you on board!"

NB: remind respondents that we'll record the interviews

As part of the project, we're going to ask you to film videos of yourself on your phone, giving us feedback and responding to questions. We'll make a short video of short clips from all the participants from the research and the footage may be used for the client's websites or pages, shared at conferences etc.

We're going to keep in touch throughout the project via WhatsApp (we'll explain a bit more later) but if you have any questions at all, you can always send us a message.

This interview is all about getting to know you and your household a bit better.

Introduction (10 mins)

To start, I'd love it if you could introduce you and your household to me and tell me:

- Your names
- Ages
- What keeps you all busy
 - Work
 - Hobbies (if retired)
 - Responsibilities
- Where you live
 - How long you've lived there for
 - What you like about where you live
 - Do you plan on staying there in the long term?

Tell me a bit about your lifestyle in general:

- What do you get up to for fun?
- How much time do you spend at home?

Great, and I'd love to hear more about your home:

- Explain your home set up
 - Type of home: house, bungalow, flat
 - Age of house
 - Layout: bedrooms, bathrooms etc.
- Do you own your home or are you renting?
- How long have you lived in this home?

I'd like to ask you now about the [past of living](#) crisis, if you feel comfortable sharing:

- How have you and your household been coping?
- Has it affected you? If so, in what ways?
- Have you changed any of your behaviours as a result?
 - Probe: within the household, reducing usage to save on electricity, gas, water

Garden introduction (15 mins)

1



We understand that you have a garden or outdoor space, can you tell me a bit more about it:

- Describe the space in as much detail as possible
 - Probe: size, lawn vs. patio/decking
- What 3 words do you associate with your garden...
 - ...in the middle of summer
 - ...in the middle of winter
- What do you tend to use your garden for? How often?
 - Moderator to ensure they get answers for all household members
- What prompts you to go outside into the garden?
- Does your garden usage differ depending on time of year?
- For those who garden
 - What do you grow in your garden?
 - Probe: fruit and veg

Now let's talk about water usage in the garden:

- Tell me about your outdoor tap
 - Where is it situated?
 - Is it easy to access?
 - What do you use it for?
 - Is there anything you prefer to use the inside tap for (even when the water is being used outside)?
- In what ways do you use water in the garden? Please explain in as much detail as possible
 - Examples to prompt:
 - Watering the plants
 - Watering the lawn
 - Cleaning the decking/patio
 - Washing something bike/furniture
 - Anything [pet](#) related (washing, cooling them down)
 - Padding pools or hot tubs
 - Pond/fountain
- Thinking about a typical week in summer (take the previous week, for example), describe your typical activity in the garden, highlighting where you've used water.
 - Moderator to probe on any water activities and encourage participants to think about how often they do things
- How does this typical week in summer differ to your garden activities and water usage during the most recent heatwave?
 - What were you doing to keep cool?
 - Did you find you were using more/less water than a typical summer day?
 - If more, what for?
 - Was there any point where it was too hot to venture out into the garden?
- How does all of this compare to a typical week in say January?

(For those who water the garden)

- Please talk me through your watering technique:
 - What do you water in the garden?
 - How do you tend to water the garden?
 - And how often?
 - Talk me through your watering routine if you have one
 - Does the amount/frequency of watering depend on anything e.g. the weather?

Next steps of the project (5 mins)

2



As mentioned earlier, we will set up a WhatsApp group with you, me and one of my colleagues where we will stay in touch for the duration of the project. You can use this to answer any questions you may have but primarily we'll use it to gather feedback from you over the next 10 weeks.

We've sent you a water logger that we want you to install on your outdoor tap. (Moderator to confirm whether the water logger has been received and installed.) If you need any help installing the water logger please don't hesitate to give us a call.

What we'd like you to do is give us a water logger reading once per week for the duration of the project (10 weeks).

- You can do this by sending a photo or video of the water logger and make sure the reading is clear. When you send this, give us a quick rundown of what you've done in the garden that week and where you've used water. Video is probably the easiest way to do this, but you can type it out and send a photo if you'd prefer.

We'll also be sending regular check-ins, [questions](#) or short tasks for you to answer and complete throughout the fieldwork period. These won't be lengthy tasks, and you don't need to answer the minute it comes through, but we'd appreciate an answer within 24 hours, if possible. We'll send you nudges if we think you may have forgotten to get back to us.

That's it for now, we'll be speaking to you in 2 weeks' time to set the next set of tasks for the project.

Moderator to confirm date and time of second interview and ask respondent if they have any questions at all.

Thanks and close

3



Interview 2 (week 3 of 10): discussion guide



Garden Water Understanding behaviour change Discussion Guide – Interview 2 (Week 3 of 10) (30 mins)

NS: Moderator will draw upon updates and observations from the previous 2 weeks of fieldwork and probe on these throughout

Welcome: Thanks so much for joining the call, it's good to speak with you again

Introduction (5 mins)

- How have things been in the past two weeks?
- Have you had any high points or low points?
- Has everyone in your home been in as normal?
 - Probe: for any with older kids, are they home at the moment or away at uni/their own homes
- Have you had any people to stay at all?
- Have there been any changes in the household at all? People coming or going?

Logger task (10 mins)

- How have you found the water logger reading task?
 - Did you find it easy enough to read?
 - Did anything surprise you?
 - How aware were you of the logger?
 - Do you think it made you think or behave differently in any way?
- Let's go through some of the readings you've sent in so far
 - Moderator to recap logger readings
 - What do you make of these?
 - What are your overall thoughts on the readings you took?
 - Were they higher or lower than you expected?
 - Do you think the amount you used is more, less or the same as the average person? (Consider your neighbour or a friend with a similar household, for example)
- Let's now talk about some of the activities you did in the garden that involved water
 - What were the key things you've done over the past two weeks?
 - Are there any activities in particular that you think made up a big proportion of your water use?
 - Which? And why do you think that?
 - Which activities would you say were 'more essential' vs. 'less essential'?

Task setting (15 mins) – skip to TUB section for those under hosepipe ban

As you know, this project is focused on learning all about how people use water in their day to day lives, specifically in the garden.

Over the next 8 weeks, we're going to challenge you to reduce the amount of water you use overall in the garden. We're now going to ask you to set a target and task yourself to try and adopt a range of different water saving behaviours.

Target

- First of all, what do you think is a realistic target to set?
- We saw that in the first week you used X litres and in the second week you used Y litres... what do you think you'd set as a weekly target?

1



- Moderator to help respondent set a realistic weekly target (this could be strict per week, or on average over the next 8 weeks)
 - Probe on why they've chosen this as a target
- How easy do you think this will be for you?

Unprompted ideas to reduce usage

Let's think about some of the things you could do to reduce the amount of water you use in the garden...

- Do you have any initial ideas?
- Are there any bad habits you can think of when it comes to water use?
- What do you think will be easy to do?
- Anything you think that will be particularly challenging?
- Is there anything you can think of that you could do but you think will be too difficult?
- Are there any individuals within the household that may find this task harder than others?

Prompted ideas to reduce usage

We have some ideas that you could draw upon to reduce your usage which I'll read out:

- Changing the setting on the hosepipe if you have a hose gun
- Watering the garden with a watering can instead of the hosepipe
- Changing your watering routine to be more efficient (time of day, watering roots instead of leaves)
- Skipping parts of your watering routine if you feel your plants don't need it
- Collecting rainwater in the garden and using that to water the plants or generally in the garden
- Try to avoid watering the lawn
- Reusing water from inside the house to water the plants e.g. from:
 - The dehumidifier
 - The drier
 - Water from the tap or shower (when left to run to cool down/heat up)

- Which of these ideas feel realistic for you to try?
 - And which will be easiest to maintain do you think?

Thoughts on behaviour change

- Overall, how easy/difficult do you think you'll find it to adopt water saving behaviours?
 - What about others in your household?
- Do you think these behaviours will stick in the long term?
- How motivated are you to reduce your water usage?
 - Do you anticipate anything will stop you from adopting these behaviours?
 - Is there anything in particular that will encourage you to keep on track?
- How much of an impact do you think these behaviour changes will have on how much water you use?

For those affected by TUBs (15 mins)

- Where did you first hear about the hosepipe ban in your area?
 - What were your initial reactions?
 - How do news stories about hosepipe bans and water shortages make you feel?
- How does the hosepipe ban affect you?
- Is it clear what you are and aren't allowed to do under a hosepipe ban?
 - How has this affected your behaviours?

2



- Have you adopted any new behaviours in place of using the hosepipe?
- To what extent, if at all, is the hosepipe ban a source of concern?
- Have there been any instances when you've used your outdoor tap?
 - If so, what for?
- How do you feel about the implementation of hosepipe bans generally?
- Is it clear why water companies have had to implement hosepipe bans?
- To what extent, if at all, does the introduction of a hosepipe ban mean that we should use water differently in other areas of the household?
- Given the ongoing water shortage in many parts of England, what is the balance of responsibility between water companies and us as individuals for helping to solve the problem?
- To what extent, if at all, do you think your neighbours and friends care about how much water you're using at the moment?

[if time] And lastly thinking more generally

- What are your general attitudes towards the environment in general?
 - What behaviours have you adopted to be more environmentally friendly?
- Would being more environmentally friendly be something that would motivate you to maintain water saving behaviours?

Thanks and close

Thanks very much for your time today, that's it for now. We'll be in touch on WhatsApp but let us know if you have any questions. Good luck!

3



Garden Water Understanding behaviour change Discussion Guide – Final Interview (Week 10 of 10) (30 mins)

NB: Moderator will draw upon updates and observations from the previous 9 weeks of fieldwork and probe on these throughout

Welcome: Thanks so much for joining the call, it's good to speak with you again

REMINDER: Record the session

Intro

- How have things been since we last spoke, 8 weeks ago?
 - Any significant changes in your life or your routines?

Logger Task (5 mins)

- How have you found having the water logger over the last 8-10 weeks?
 - What are your impressions of how much water you used?
 - Did anything surprise you? What / Why?
 - Were there any specific tasks/activities you did that used **more or less water** than you thought they would?
 - Has it made you think or behave differently in any way?

During our last interview, you said you would try ... [refer to tasks from previous interviews]

- How did you find these water saving tasks?
 - Which did you find more easy or difficult? Why?
 - Were certain more easy or difficult at specific times / in specific situations? Why?
 - Did some members of your family/household find some tasks more easy or difficult to do? Who? Why?
- Has any part of the tasks we set made you think differently about how you use water in the garden?
 - What about using water inside the home?
 - If so, which part do you think influenced you the most – the water saving tasks, having the water logger or looking at the readings on your water logger?
- What, if anything, do you think would have helped you make these behaviours into long-term habits?
 - *Probe: communications from water companies giving advice, tips, information.*

[RESPONDENTS NOT IN TUB AREA – 5 mins]

During our last interview, you also set yourself a target of X litres a week (refer to target set in previous interviews).

- **[if not applicable]** how well do you think you did?
- **Provide figure of average weekly reading:** what are your thoughts on that figure?
 - Surprised / Expected?
 - Why?
- Why do you think you went over / under your target?

- [For those who went over] Which activities do you think used the most water?
- What, if anything, do you think would have helped you reach your target/use less water?
 - *Probe: devices that help save water; communications from water company with tips and recommendations.*

Weather (5 mins)

The weather has changed quite a bit over the course of this research project. When it started 10 weeks ago it was extremely hot and dry.

- Did you notice any changes to your behaviour in the garden during the summer due to the hot weather?
 - Do you think you will continue any of these into the autumn and winter?
 - If so, why?
- Were there any activities you'd normally do in the garden that you didn't do due to the hot weather?
 - *Probe: washing the car, using paddling pools etc.*
- How did your garden fare during the long period of hot weather?
 - *Probe: lawn going brown; plants dying.*
- How did the period of hot weather change the way you gardened?
 - *Probe: watering the plants; buying plants; planting new plants/seeds, let the lawn go brown*

With rising global temperatures, we are likely to experience hot summers like this one more frequently as time goes on.

- How, if at all, will you garden differently as a result of the hot weather we experienced?
 - *Listen out for: buy drought resistant plants; plant appropriate plants for different parts of the garden (shaded / dry); let lawn go brown, install more rainwater storage devices.*

As you'll know, with the change of the seasons the weather is now cooler and more wet.

- How has your garden changed since it started raining?
- How has the change in the weather affected your water usage in the garden?
 - And how has it affected how you use your garden?
- What has remained the same, despite the change in the weather?
 - ...In terms of using water in the garden?
 - ...In terms of using the garden more generally?

Hosepipe Bans:

[RESPONDENTS IN TUB AREA – 5 mins]

A hosepipe ban came into enforcement in your area several weeks ago.

- How have you found the ban since then?
- To what extent did you manage to completely follow the ban? Moderator to ensure participant knows they can be honest about this and will not be reported or fined etc.
 - **If not completely followed:**
 - Why?
 - In which situations did you not follow the ban?
- Did you see other people not following the ban?
 - If so: how did that make you feel?



- What contact, if any, did you receive from your water company about the hosepipe ban?

[if received comms]

- o What were your thoughts on the communications you received?
- o What should they have done *differently*, if anything? Could they have been improved in any way?

[if did not receive comms]

- o How did you find out about the hosepipe ban?
- o How do you feel that you did not receive/or notice receiving any communications from your water company?
- o What sort of communications do you think you should have received?

[ALL – 5 mins]

- Do you think there will be more regular hosepipe bans in the future?
 - o Why do you think this?
 - o How often do you think they might occur?
- Are you aware that there are currently hosepipe bans still in place?
 - o How long do you think the current hosepipe bans will last?
 - *Probe: change in weather/raining more*
 - o In your opinion, how much longer do you think the hosepipe bans **should** last?
 - o For South Staffs/Cambridge Water customers– is there a hosepipe ban in your area *at the moment*?
- Do you think there's anything that could have been done to reduce the likelihood of the current hosepipe bans?
 - o *Probe: by water companies, by households, by someone else?*
- What do you think water companies should do to try and reduce the likelihood of hosepipe bans being imposed in the future?
- Do you think water companies should impose hose pipe bans more regularly every time there is an extended period of hot weather (e.g. 2-3 months) to protect supplies for the future?

Comms (5 mins)

I wanted to change the topic somewhat and talk about water company communications; by that I mean any direct contact from water companies to you via letter, text, or email as well as adverts on radio, social media, newspapers by water companies. Specifically, I want to talk about any communications around water saving and water efficiency.

- What communications, if any at all, have you seen, heard, or received from your water company over the past few months?

[if received comms]

- o What were your thoughts on the communications you saw / heard / received?
- o How, if at all, could they have improved?
- o What should they have done *differently*, if anything?

[if did not receive comms]

- o How do you feel that you did not receive see / hear / receive any communications from your water company?
- o What sort of communications do you think you should have received?

Water Resource (5mins)

- We've spoken previously about the topic of water resource and water scarcity. Is this something you take notice of?
 - o How has this change since we spoke right at the beginning of this project?
 - o What do you think has influenced this? *Probe: the research; hosepipe bans; hot weather; drought.*

Thanks and close

Hot weather interview (timing weather-dependent): discussion guide



Garden Water Understanding behaviour change Discussion Guide – Hot Weather Discussion Guide (Week 2 of 10) (30 mins)

NB: Moderator will draw upon updates and observations from the previous weeks of fieldwork and probe on these throughout.

Welcome: Thanks so much for joining the call, it's good to speak with you again.

Data protection remind that this session is being audio/video recorded but everything you say will remain confidential and we only use these for internal research purposes.

Introduction (5 mins)

It's great to speak with you again and thank you so much for all of your communications over the past month or so.

- How have things been since we last spoke?
- Have you had any high points or low points?
- Has everyone in your home been in as normal?
 - Probe: for any with older kids, are they home *at the moment* or away at *uni*/their own homes
- Have you had any people to stay at all?
- Have there been any changes in the household at all? People coming or going?

Recap on past few weeks (20 mins) [FOR THOSE IN TUB AREAS SKIP TO NEXT SECTION]

Last time we challenged you to reduce the amount of waste you use in the garden.

- How has this gone overall?
 - Have you managed to stick to your weekly target?
 - [IF YES] Why do you think you managed this?
 - [IF NO] Why do you think you did not manage to stick to this?
- What have you done specifically to try and reduce the amount of water you use in the garden?
 - Which things did you find easy to do? Why?
 - Which things did you find difficult to do? Why?
- Were there any challenges or behaviours that others in your household / family found particularly easy or difficult? Why do you think was the case?

And let's also talk about the periods of hot weather we've had recently:

- Did you notice any differences in your behaviours when the weather was particularly hot?
 - What were they?
 - Why did the hot weather change things?
 - At what point does the weather start to change your behaviours? *e.g.* after a certain temperature, or when it's solid sun/no breeze.



- For those with kids: did the kid's outdoor behaviours change at all?
- How did you feel about maintaining the water saving behaviours you had set yourself?
 - Were there any water saving behaviours that were harder to maintain in the hot weather?
- Did you find you were using *more or less water* for anything?
 - What was it and why?
- Moderator to try and tease out at which point the weather becomes too much and motivation to save water dwindles...
- How do you feel about letting the grass going dry/yellow/brown?
 - With temperatures rising, do you think you'll take this into account when gardening and deciding what to plant?

TUB-specific questions (20 mins) [FOR THOSE AFFECTED BY TUB]:

- How are you finding the hosepipe ban?
 - Have you been able to maintain your garden as you would like during the hosepipe ban?
 - How have you been maintaining your garden without using the hose?
 - How has the hosepipe ban changed how you maintain your garden?
- Do you think you are using *more or less water* as a result of the hosepipe ban?
 - Why?
- How are you finding following the hosepipe ban?
 - Have there been any instances when you've used the hosepipe?
 - [IF YES] If so, what for?
 - How do you feel about people not following the hosepipe ban?
 - [IF NO] How do you feel about people not following the hosepipe ban?
 - What would you do if you saw someone using their hosepipe?
 - Have you seen anyone else using their hosepipe?
- Have there been any instances where you wanted to use the hosepipe but did not?
 - Why?
 - What stopped you?
- Who in your household / family has found it easier or more difficult to follow the hosepipe ban?
 - Why is this?
- How has the hot weather made it *more or less difficult* to follow the hosepipe ban?
 - Why is this?

Thanks and close



~~Garden Water Understanding behaviour change~~
Hot Weather Diary Task (Week 2 of 10)
(Over period of hot weather, 3-5 days)

Forecasts are predicting a spell of nice weather, and we'd like to find out how you use water in the garden during this hot period.

- How are you planning on using water in the garden over the next few days?
- How will the hot weather influence how you use water in the garden?
- [IF IN TUB] How will the hosepipe ban change how you use water in the garden?

After they have responded...

Over the next 2-3 days, we're going to ask you to complete a Diary Task – each day we'd like you to keep a log of all the activities you complete in garden that use water, noting how much water each activity requires by looking at the water logger once you finish each activity.

Please send us a picture of the water logger after each activity and tell us what you have just done. For the first activity you complete, please also send the starting water logger reading so we can work out the difference.

Looking forward to hearing your responses!





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