# **Closure of Project Report - March 2020**

Great Yarmouth
FRAMEs
Water Butt
Project
Pilot Study



Reducing the Risk of
Surface Water Flooding
in the Great Yarmouth Area





# Great Yarmouth FRAMEs Water Butt Project Pilot Study Final Report March 2020

# 1. Executive Summary

# Background

The Great Yarmouth Water Butt pilot project was commissioned by Anglian Water, Norfolk County Council (Local Flood Authority) and the FRAMES project of the North Sea Interreg programme and delivered through the National Flood Forum Trading Services C.I.C.

The pilot project was part of the FRAMES, (Flood Resilient Areas by Multi-layer Safety), agenda. FRAMES was a project co-funded by the North Sea Region Programme 2014-2020. It aimed to increase the resilience of areas and communities by working with the Multi-Layer Safety (MLS) Concept, a policy strategy that integrated measures for prevention, mitigation via spatial planning and emergency response. FRAMES LINK

In addition, the Great Yarmouth Water Butt Pilot Project was commissioned as a result of the findings of the 2016 Norfolk County and Great Yarmouth Council Surface Water Management Plan (SWMP). <u>LINK</u>

Discussions around funding and scope for the project commenced in 2017. The project manager was appointed, and the project commenced in January 2018 and ceased on 31<sup>st</sup> March 2020 in-line with the end of funding from the funding partners.

Direction of the project was overseen by a Project Board/Steering Group which consisted of representatives from Anglian Water, Norfolk County Council, Great Yarmouth Town Council flood team and the National Flood Forum.

### Ambitions/Methodologies

The intention was that the project / pilot study - tested:

 New approaches to surface water flooding by fitting especially designed slow release mechanisms to household water butts and raised beds and installing industry designed slow release water butts and planters

The purpose of the project was to test and pilot the practicalities of delivering a slow release (leaky) water butt and slow release (leaky) raised bed project in a targeted area, focusing on:

- o Community Engagement
- o Take up and Statistics
- o Procurement
- o Products
- o Installation

The main aims and ambitions of the project were to assess, review and understand:

### Communication/Stakeholder Engagement and Take Up

- Stakeholder engagement and communication/media strategy to inform residents, businesses, local authorities and agencies, of the project and encourage take up of products and installation to reduce the risk of surface water flooding in the area
- o Understand the approach to community engagement and take up over a short timescale
- o Which methods of engagement were more successful?
- o Motivate residents to understand and act where necessary to reduce and prepare against the risk of surface water flooding

### Procurement/Products and Installation

- o Delivery with a specific focus on the approaches and designs that are most effective in ensuring long term sustainability
- Effectiveness of different water butts and raised bed models, installation methods, diverters, filters, slow release mechanisms and other related products
- Motivate the market to design and produce slow release mechanisms and water butts/raised beds
- o Understand flow rates and relationship between volume
- o Understand motivation and selection of products
- o Develop a procurement process to appoint legal support and contractual documents and suppliers/installers and mitigate risks and issues and liability

### **Project Governance and Planning**

- o Set up project governance and planning
- Understand scope and aims/objectives of the project
- o Lessons Learned and case studies
- o Assess the effectiveness of the project

### Measures

Results and success were measured by the number of items installed and an estimation of their combined water storage capabilities. Unfortunately, at the time of commencement of the project there were few options that were cost effective and reliable to measure existing flows into the drains to develop a standard and a method to measure reduction in flow once the water butts/raised beds had been installed.

### Conclusions

The project was successful in achieving the project outcomes and showed the value and effectiveness of the approach; specifically, in terms of capturing and slowing the flow of surface water and reducing the risk of surface water flooding in a low intensive and cost-effective way. It helped to smash the premise that water butts were not an effective SuDS method to reduce the risk of surface water flooding and help set a standard and method that could be replicated to any degree in other locations, situations and SuDS products.

### The pilot project underlined:

### Communication/Stakeholder Engagement and Take Up

o Take up was reliant on successful stakeholder engagement and communication strategy. Understanding motivation and key messages the community will relate to was vital.

- Utilising different engagement and communication methods were crucial, however, the most successful method of encouraging take up was by way of seeing first-hand or hearing about the project. Interest and installations slowly increased as friends, family and neighbours recommended the products and project
- o Recognising the different people/place/flood relationships in each community was a prerequisite for meaningful engagement to proceed
- o The value of Information and advice, and strengthen awareness of surface water flooding in the community to promote take up
- Support awareness of the effectiveness of water butts, helping to smash the premise that water butts are not an effective SUDs method to reduce the risk of surface water flooding
- Support the community to feel enabled to work with others to reduce their risk of flooding
- o Support those that did not experience flooding to assist those that did flood

### Procurement/Products and Installation

- o Identify and promote design of different designs of slow release mechanisms that can be replicated in other situations and projects
- Offering different sizes, designs and models of water butt and raised beds ensured that there was likely to be a product to match the varying sizes and locations of properties. It also attracted residents who were more likely to select a well-designed, attractive water butt rather than a more basic model they are likely to have already fitted. It also enabled the project to test the different model, their popularity and effectiveness
- Although including installation was costly, it remained a cost-effective method. It ensured that the products were fitted correctly and that the slow release mechanism was effective
- The project developed an efficient method of procurement including contracts and limiting liability. It created effective processes and procedures around selecting, surveying, installation and payment.

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# 2. Aim of Report

The purpose of this report is to provide an overview of the project and to record what went well and what could have been improved. It will also review the benefits and outcomes, and how well the project went according to the project plan. The report will evaluate the approach, delivery and effectiveness of the project on the reduction of the risk of surface water flooding.

# 3. Project Background / Introduction

### **FRAMES**

The Great Yarmouth Water Butt pilot project was part of the FRAMES, (Flood Resilient Areas by Multi-layer Safety), agenda. FRAMES was a project co-funded by the North Sea Region Programme 2014-2020. It aimed to increase the resilience of areas and communities by working with the Multi-Layer Safety (MLS) concept, a policy strategy that integrates measures for prevention, mitigation via spatial planning and emergency response. https://northsearegion.eu/frames LINK







Diagram 1.
Flood Resilient
Areas by
Multi-layered
Safety Concept

### **Great Yarmouth**

Great Yarmouth was chosen because it is significantly at risk of flooding from both surface, river and sea. Funding partners (Anglian Water, Norfolk County Council and National Flood Forum) joined forces with FRAMEs to fund a revolutionary pilot to reduce the risk of surface water flooding in the Great Yarmouth area by the installation of slow release 'leaky' household water butts and raised beds.



https://www.google.co.uk/maps

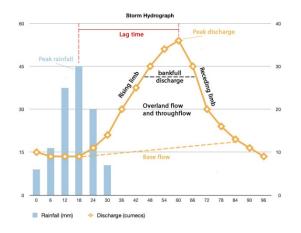
Surface water flooding is a major problem in Britain. Over 3 million properties in England are at risk of surface water flooding, even more than those at risk from rivers and the sea (2.7 million) (source

https://www.gov.uk/government/news/surface-water-the-biggest-flood-risk-of-all).

Whilst large numbers of properties are affected, they are often in small groups, making large capital schemes



unviable. One element is the surcharging of sewerage and drainage systems during periods of heavy rainfall, leading to water and sewage escaping from the systems and flooding streets, gardens, homes and businesses. Reducing the volume of water entering the drainage and sewerage networks during heavy downpours and releasing it into the system later is therefore a potential solution in certain circumstances.



Hydrograph showing the lag time between rainfall and flowing back into rivers

 $Source\ https://www.bing.com/search?q=lag+time+on+a+hydrograph\&FORM=QSRE1$ 

There are several types of intervention that can "slow the flow" in an urban setting, including street level and property measures. Property measures can include simple and inexpensive approaches such as slow release 'leaky' water butts and 'leaky' raised beds, through to more expensive and disruptive measures such as permeable paving and greywater systems.

The purpose of the project was to test and pilot the practicalities of delivering a slow release (leaky) water butt and slow release (leaky) raised bed project in a targeted area, focusing on:

- o Community Engagement
- Take up and Statistics
- o Procurement
- o Products
- Installation
- Project Governance/Planning

The Great Yarmouth Water Butt Pilot Project led on from the result of the findings of the 2012 Norfolk County and Great Yarmouth Council Surface Water Management Plan (SWMP) report. Its aim to progress one of the measures of the report, surface water management. SWMP (Gt Yarmouth Flood Plan LINK <a href="https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/flood-and-water-management-policies/surface-water-management-plans/great-yarmouth-borough-swmp">https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policies/surface-water-management-plans/great-yarmouth-borough-swmp</a>)

Discussions around funding and scope for the project commenced in 2017. The project manager was appointed, and the project commenced in January 2018. The project ceased on 31<sup>st</sup> March 2020 in-line with the end of funding from the funding partners.

The funding partners were Anglian Water, Norfolk County Council and the FRAMES project of the North Sea Interreg programme and the project was delivered through the National Flood Forum Trading Services C.I.C.

A Steering Group consisting of the funding partners and Terms of Reference were agreed to direct the project.

# 4. Project Aims and Objectives

The pilot project aimed to test new approaches to surface water flooding by fitting especially designed slow release (leaky) household water butts and raised beds to reduce the risk of surface water flooding. This project provided valuable information to enable organisations develop similar initiatives across the country and further afield.

Surface water flooding happens when the ground, rivers and drains cannot absorb heavy rainfall. The household water butts/raised beds were especially designed to catch the rainfall off roofs controlling and slowing the flow of water onto the roads, helping the drains to manage and reducing the risk of surface water flooding.

The household water butts/raised beds were fitted with a mechanism that slowly released the rainwater after it had rained. The water butts/raised beds were designed to retain approximately a third for garden use, this encouraged take up as many of the residents required the water butts to water the garden.

### 4.1 Measures

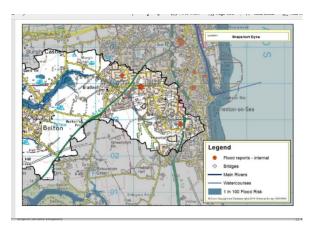
The results were measured by:

- o The number of water butts/raised beds installed
- o An estimation of their combined water storage capabilities
- o Feedback from stakeholders including via a questionnaire survey
- o Lessons Learnt

### 4.2 Scope

### In Scope

The geographical areas in scope included most of Gorleston (Sea front Gorleston, Claydon, Long Lane, Upper Stepshort), Bradwell (Upper Stepshort) and North Yarmouth (Northgate) in the Great Yarmouth area, Norfolk, East Anglia, England, UK. It included large areas around the flood zones because it was based on the amount of rainfall that fed into the drains that lead to the flood zones. The scope was defined by the drain system feeding residents that



### Scope included:

- O All residents, homeowners, landlords, private and council tenants etc were eligible within the scoped areas
- o All businesses, organisations, agencies, charities, schools, other educational establishments and care residents were eligible within the scoped areas
- o The number of products that could be installed on a property were only limited to the number of downpipes leading to a drain
- Water butts required to be fitted to a downpipe leading directly from a rainfall gutter that leads to a drain
- o Drains could be open or closed
- o Soakaways not included as the project's aim was to support drains during heavy rainfall
- o Downpipes, standard plastic round and square
- o Cast iron downpipes excluded because of the risk of costly damage to the downpipe
- Water butts/raised beds were supplied free of charge
- o Installation was included free of charge
- o A wide range of water butts/raised beds were made available from several suppliers
- Water butts were to be manufactured of good quality, long lasting and recycled materials where possible. The aim to go for long term resilience rather than short term
- All water butts and raised beds required to have a slow release mechanism either as part
  of the design or retro fitted so that when rain level hit a certain level, the rainwater is
  slowly released, keeping 1/3 available for residents garden use

# 4.3 Phases of Delivery

Please refer to annex 2

# 4.4 Achievements

Please refer to annex 1

### 4.5 Key Lessons Learnt

### Communication/Stakeholder Engagement and Take Up

- Take up was reliant on successful stakeholder engagement and communication strategy
- o Understanding motivation and key messages the community will relate to was vital
- o Utilising different engagement and communication methods were crucial
- Most successful method of encouraging take up was by way of seeing first-hand or hearing about the project. Interest and installations slowly increased as friends, family and neighbours recommended the products and project
- o Recognising the different people/place/flood relationships in each community was a prerequisite for meaningful engagement to proceed
- The value of Information and advice, and strengthen awareness of surface water flooding in the community to promote take up
- Support awareness of the effectiveness of water butts, helping to smash the premise that water butts are not an effective SUDs method to reduce the risk of surface water flooding



Phase 1

- Support the community to feel enabled to work with others to reduce their risk of flooding
- Support those that did not experience flooding to assist those that did flood

### Procurement/Products and Installation

- o Identified and promoted design of slow release mechanisms that can be replicated in other situations and projects
- Offering different sizes, designs and models ensured that there was likely to be a product to meet the varying sizes and locations of properties
- o Attracted residents who were more likely to select a well-designed, attractive water butt rather than a basic model they are likely to have already fitted
- o Enabled the project to test the different model, their popularity and effectiveness
- o Although including installation was costly, it remained a cost-effective method
- o Installation ensured that the products were fitted and correctly and that the slow release mechanism was effective
- o The project developed an efficient method of procurement including contracts and limiting liability
- o Created effective processes and procedures around selection, surveying, installation and payment

# 5. Project Methodologies

Please refer to annex 2 for further information

# 5.1 Communication/Stakeholder Engagement

One of the first tasks of the project was to identify and engage with key stakeholders and understand roles, impact and influence within the project. By understanding key stakeholders, it also supported understanding of the most effective methods to engage, motivation and key messages that would be most effective.

# 5.2 Take Up

Initially, community take up was not as quick as anticipated. The message 'free water butt' did not overcome the suspicion and apathy of some of the community. Most take up was initiated by word of mouth, hearing from friends, family and neighbours who had already had an installation as part of the project. As residents had water butts/raised beds installed the more of their neighbours, friends and residents made contact.

### 5.3 Procurement

A successful procurement process was set in place, leading to contracts with a range of suppliers. A technical specification/wish list 'scope of works' was developed and shared with the suppliers for feedback before sign off. This identified possible problems around expensive insurance, suppliers may not have, but a requirement of the project.

### 5.4 Products

A wide range of quality, well designed and attractive products were carefully chosen in place of cheaper, lower quality that would not be as durable. A wide range of products enabled the project to test water butts/raised beds that worked and those that did not. It also offered a range for the range of requirements eg differing size of properties and gardens.



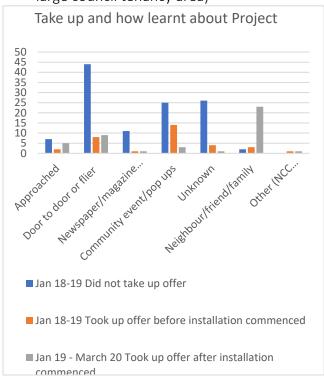
### 5.5 Installation

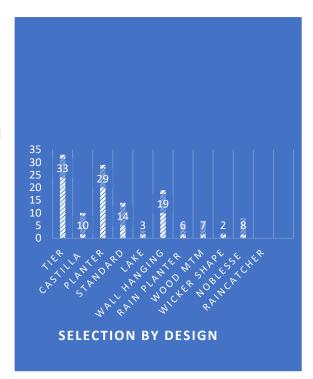
Installation was included as this enabled the project to test and measure products and installation. It also ensured that the products and slow release mechanisms were and correctly installed. The project was able to identify cost effective installations and identified issues around product design and installations. These findings were fedback to suppliers and manufacturers which influenced some designs and manufacturing methods.

### 6. Statistics

Some of the key statistics and findings were:

- o Estimated capital spend: £51,500
- o Estimated literage installed 27,200
- Most popular product: Guttermate Garden Planter 185L approximate £382.31 per unit
- Best priced per litre: Guttermate 250L standard water barrel approximately £80.99 per unit
- Most take up in an area: Upper Stepshort (this area included Bradwell and South Gorleston, the more affluent areas)
- Least take up in an area: Long Lane (this was a large council tenancy area)





# 7. Conclusion

### In conclusion:

### Aims and ambitions of the Project

- o Approximately 141 products installed within the capital spend of £53,000
- Approximately 27,200 litres installed combined water storage capabilities to capture rainfall, slowing down the flow into the drains
- o Feedback from stakeholders including via a questionnaire survey was mostly positive and where it was negative this was relating to poor installation
- Many lessons learnt and issues arising were logged, reviewed and analysed and reported within this report.

### Effectiveness of the Project

The project tested various approaches and showed that the use of SuDS could be a cost-effective method to reduce the risk of surface water flooding in certain situations. The project provided a model that other organisations/local authorities could follow or amend as required. This will support the use of SuDS to reduce the risk of surface water flooding.

### Take Up

Take up was reliant on identification and successful stakeholder engagement. Understanding motivation and key messages the community would relate to was vital. Utilising different engagement and communication methods was critical. The most successful method of encouraging take up was by way of seeing first-hand the installations. Interest and installations slowly increased as friends, family and friends recommended the project.

### Installation

Undertaking a robust procurement process was essential in the identification and attracting of professional and effective suppliers/installations. Take up was reliant on offering a choice of designs and good quality products. It also relied on installers who were both professional who were able to engage with the residents and provide a good quality installation, able to resolve issues as they emerge in a satisfactory manner.

# 8. Annexes

### 1. Achievements

### Engagement

- o Stakeholder analysis completed
- o Communication strategy/plan agreed
- Flyer/poster designed and printed for different locations/communities (amended as required)
- Developed relationships in communities, businesses, agencies and councils (project lead became known as the water butt lady by the communities)
- 'Message' agreed, reviewed and amended as required depending on audience and motivation

o North Yarmouth flyer/poster designed by local community group. The group felt that the flyer at the time would not motivate their

community

o Liaised with a range of stakeholders to provide information and promote the project

- Develop and distribute press releases throughout the project
- Participate via social media including Facebook and websites
- Door to door interaction and poster/flyer drop offs
- o Pop up street information events
- o Attended local events including fetes, coffee mornings, launches
- o Gave presentations and provided information events
- Developed several project databases to log interest of the project and take up of a product and installations
- o Distributed flyer/posters to businesses and residents across North Yarmouth
- o Spread the verbal word to residents, shops, schools and businesses including door to door
- Held meetings to introduce the project to the group and existing and newly elected Councillors
- o Introduced and arranged an informal presentation to the local North Yarmouth Group PEONY which led to installations
- o Identification of two promoters/trail blazers/champions to test the processes around selection, survey and installation
- o Facilitated information on local events and community groups
- o Introduced the resilience/flood group of North Yarmouth
- Project Manager invited to existing and arranged community pop up information events to promote the project
- o Project Manager introduced to voluntary agencies and other networks
- o Invited to other community events
- o Supported to overcome barriers around partner data sharing
- Supported the initiative to include council tenancies by providing information, introducing contacts and co-ordinating solutions around the identification of council tenancy properties and distribution of information











- o Liaised and provided contact details of a council tenant to trail blaze/champion the initiative to install water butts at council properties
- o Facilitated information on local events and community groups

### Procurement

- Develop procurement process to obtain a solicitor and procure suppliers
- o Procure solicitor to produce supplier contract, letter of agreement, amendments to the CIC and relevant information
- o Investigate, identify and procure a range of suppliers and installers to supply, deliver and install slow release water butts and raised beds
- o Develop and undertake selection and quoting process
- Develop correspondence to invite suppliers to tender to supply, deliver and install
- o Provide feedback to suppliers
- Work with suppliers to develop a range of slow release systems for water butts and raised beds including retro fit for water butts already installed in gardens
- o Develop suppliers' contract and letter of agreement for residents/businesses
- o Develop scope of works (requirements/specifications) for suppliers
- o Assess and understand the risk and issues around liability regarding installation
- o Understand and amend the CIC to ensure the charity was at limited risk around liability
- o Bank account opened for the CIC
- o Investigate and review water butts and raised beds available and select appropriate ones to be offered to residents
- Understand funding and VAT
- o Identify, develop and procure a range of water butts/raised beds to meet the different tastes and requirements
- o Identify issues around the products, manufacturing and installations
- o Identify what worked well

### Installation

- o Select a small number of residents to carry out a test exercise
- o Carried out a test exercise for wooden raised beds within a school
- o Develop process to select, survey, order, install and sign off water butts and raised beds
- o Develop correspondence to invite residents to have a survey carried out
- Develop/design option brochure and pack (providing information on the products available, the process and agreement)
- o Identify and resolve risks, issues and liabilities around engagement, installation and products
- Design label to be placed on installed products to warn against drinking water and use of pressurised water hose
- Develop work order for supplier (providing information on proposed product and installation location/requirements)
- o Develop completion of works certificate
- o Survey location of possible product installation, discussing options, locations and process. Survey also included taking
  - images of the locations, existing downpipe, connections and close-up of drains and brackets to pass to the selected supplier/installer. The resident was then asked to sign



- the letter of agreement, this particularly set out what the resident was agreeing to but also provided permission to share contact details to the supplier/installer
- Develop a database listing orders providing information re resident, product, litres, region, costs etc. From this list it was possible to provide regular updates, installation and capital expenditure reports

### Project, Governance and Planning

- Steering Group set up, terms of reference and reporting agreed
- o Dates set and invites sent to Steering Group
- o Project Plan developed and agreed
- o Communication Strategy agreed
- o Risks and Issues and barriers recorded and monitored
- Achievements, aims and objectives, benefits, case studies and lessons learnt monitored and recorded
- Scope of project agreed. This included eligibility of geographic locations. It also included products, equipment and installation
- o Agreed scope of slow release specifications
- Technical requirements agreed eg water-butt/raised beds to lead from downpipe to drain or drain on road
- Quality assurance, performance management and data management agreed, monitored and recorded
- o Budget and finance agreed, monitored and recorded. Regular reports re capital and expenditure produced
- Scoped areas walked, characteristics, history, geography, dynamics and demographics recorded and short reports on created to support understanding of locations

# 2. Project Methodologies

### Engagement

One of the first tasks of the project was to identify and engage with key stakeholders and understand roles, impact and influence within the project. This assisted in the development of a stakeholder analysis and communication strategy/plan. By understanding key stakeholders, it also supported understanding of the most effective methods to engage.

The Project Officer was introduced to the three community Engagement Managers for Great Yarmouth, Gorleston and Southtown/Cobholm. Comeunity on King Street Great Yarmouth, MESH on the Shrublands site Gorleston and Make It Happen at the Kings Centre Southtown. At each of these offices a team engage and support local people. LINK (https://www.great-yarmouth.gov.uk/article/2078/Neighbourhoods-and-communities) This introduced the project manager to the communities via a method which residents trusted.

A one-page flyer that also acted as a poster was designed to cater for most areas and stakeholders. These were distributed to immediate streets in scope, including shops, residents, businesses, schools and community hubs eg libraries. However, the Great Yarmouth group designed their own flyer meeting the needs of the North Yarmouth catchment area.



The key message started off as a 'free' water butt and was changed to 'help your community' as the 'free' message was not encouraging take up. In addition, take up increased once the flyer/poster showed the water butts/raised beds on offer. It was a difficult message to encourage those who were not affected by surface water flooding to help those who were affected. The message 'slow the flow' and 'everyone has a role' were promoted by the project.

Engagement activities took place in all scoped areas and included:

- a. Door to door discussions and flyer distribution. Most residents were not at home and so a flyer was placed in the letter box. Revisits took place to catch residents at other times. When residents engaged it was vital to appear friendly and have the identity badge on show. It was found that representing a charity, engendered trust and residents to discuss flooding issues and the project. The ultimate objective was for householders to sign up to have a slow release water butt installed.
  - Many residents were either in a hurry or distrustful. Even though the flyers clearly showed partner logos, communities are told to be careful and wary of door to door scams.
- b. Attending community groups gave the Project Officer an opportunity to engage in a relaxed and trusting atmosphere. These included church coffee mornings, leisure clubs and activities. One craft activity engendered meeting with the local community led library manager that had experienced significant flooding for many years, causing the library to close for a considerable time on several occasions. The project was able to support the library by providing information and installation of water butts and raised beds. The library supported the project and engaged many residents to enquire about the project.
- c. Pop up information events on streets and community shopping centres etc enabled the project to approach the public and provide information on flooding and the project. Most popup events were in partnership with other charity, agencies and council engagement workers.
- d. Show casing the project at local events ie conferences enabled businesses and the public to learn more about the project in an environment of learning.
- e. The project was also involved on several interspaced occasions in a media push of local newspapers and magazines, bulletins, radio and social media. Take up from these methods was not as effective as others.
- f. Introduction and contact with Councillors and Parish Councils and attending meetings to provide a brief where possible.
- g. Introduction and contact with other key stakeholders including charities, agencies and other partners.

The Community Engagement Managers recommended the project contact a group who were the sole group remaining from an initiative to put together three flood groups. The group was struggling to remain together and was disillusioned by the reduced membership and other barriers. The group mainly worked with the North Yarmouth group PEONY (People of

North Yarmouth) to support local causes. (https://www.facebook.com/PeopleNYarmouth/) LINK

The Project Officer met with the Chair of the group and his wife and provided information on the project. They were excited about the opportunities this could bring and arranged for the Project Officer to meet the group. The group included Councillors and agreed overwhelmingly to support the project.

The group supported the project by:

- o Designed a flyer/poster for North Yarmouth distribution
- o Distributed flyer/posters to businesses and residents across North Yarmouth
- Spread the verbal word to residents, shops, schools and businesses including door to door
- Held meetings to introduce the project to the group and existing and newly elected Councillors
- Introduced and arranged an informal presentation to the local North Yarmouth Group PEONY which led to installations
- o Identification of two promoters/trail blazers/champions to test the processes around selection, survey and installation
- o Facilitated information on local events and community groups

The Community Managers supported the project by:

- o Introduced the resilience/flood group of North Yarmouth
- Project Manager invited to existing and arranged community pop up information events to promote the project
- o Project Manager introduced to voluntary agencies and other networks
- o Invited to other community events
- Supported to overcome barriers around partner data sharing
- Supported the initiative to include council tenancies by providing information, introducing contacts and co-ordinating solutions around the identification of council tenancy properties and distribution of information
- Liaised and provided contact details of a council tenant to trail blaze/champion the initiative to install water butts at council properties
- o Facilitated information on local events and community groups

### Take Up

Initially, community take up was not as quick as anticipated. The message 'free water butt' did not overcome the suspicion and apathy of some of the community. The area has a significant low-income demographic who tend to live in rented properties, some without gardens.

In addition, the community were suspicious of direct selling and the offer of free products, especially via door to door and flyers. Initial take up came from middle aged/retired, homeowners. When asked, motivation was to help the community but also the opportunity to have installed a free designer good quality water butt to provide water for their well-kept garden. Almost all gardens of those who went ahead with an installation were well kept mature gardens.



Most take up was initiated by word of mouth, hearing from friends, family and neighbours who had already had an installation as part of the project. As more and more residents had water butts/raised beds installed the more of their neighbours, friends and residents made contact.

It was a challenge to ask residents who were not necessarily impacted by flooding to capture the water before it reached those who did flood. The message 'support your community' was more successful in this case. Once the theory around slow release water butts and how capturing the water before it reached the lowest point which could be a school, road or shops; residents were more likely to understand how fast running rain water affected them and the community, take up installation was more likely.

Council tenancies - the Council took some time to respond to enquiries due to long term sickness and concerns around legionella and maintenance. Following discussions and resolutions to barriers, the Council agreed installation to Council tenancies based on a request from residents and installation of a basic water butt design. The agreement signed by residents included warnings around legionella and a warning label was placed on the water butt. Once Council tenants were targeted it was close to the end of the project and take up was low. It was Christmas, Brexit and a general election was taking place. Tenants at that time had other priorities. Other barriers included:

- o How to identify a Council tenancy (the Council were unable to share information on specific tenancies)
- o The local bulletin/magazine deadline had been missed
- Many Council properties had shared downpipes ie flats
- Numerous Council properties had small or no gardens and many were unkept
- o The Coroner Virus was an unseen barrier that affected take up towards the end of the project

### Procurement

### Solicitor

A specification was drawn up to provide a brief to select a solicitor. The solicitors were asked to quote against the specification and a selection made against their response and quotation.

The appointed solicitor drafted a supplier contract against the specification provided on a 'as required' basis and drafted a letter of agreement (contract) the residents would be asked to sign. The letter of agreement was named and designed so not to deter residents. The content was also written in clear understandable concise language.

Possible suppliers/installers nationwide were approached and asked if they were interested in taking part in the project and procurement process. Most suppliers were identified from an online search, recommendation or they approached the project. The focus was very much on use of local suppliers where possible.

### Scope of Works/Specification

The specification was adapted to develop a Scope of Works (technical specification/requirements) for the procurement process. Potential suppliers were then asked to feedback on the draft specification/scope of works and draft contract. It took time

to work with stakeholders to identify and agree scope and requirements especially around liability and other insurances.

Suppliers were then asked to complete a 'request to quote' application form based on the final Scope of Works. A formal selection process then took place. In January 2019 after a long procurement process, suppliers were selected against the specification to supply, deliver and install water butts and raised beds. The contract was on a 'as required' basis. This enabled the project to test the products/installation and select the most suitable for each installation.

## Suppliers Successful in Tender

In January 2019 after a long procurement process, the following suppliers were contracted to supply, deliver and install water butts and raised beds on a as required basis.

	Туре	Description	Weblink
Guttermate (G8)	Supply and install	A large national supplier of rainwater harvesting systems for domestic and commercial properties	https://www.guttermate.co.uk
Design 4 Plastics – Rainwater Terrace	Supply and install	An award winning, new concept design known as the Rainwater Terrace	https://www.rainwater-terrace.com/
Community Roots (Mind)	Supply, design and build wooden raised beds	A large community horticultural space in Great Yarmouth, encouraging social inclusion and continued learning. Part of Gt Yarmouth and Waveney Mind	https://www.gywmind.org.uk/community-roots.html
AC Engineering (ACE) – Rain Garden Planter	Supply	Providing construction, design and supply of drainage systems  Responsible for the design and supply of the rain garden planter	https://www.raingardenplanter .co.uk /about
Flood Ark	Installation	Manufacture and install bespoke flood barriers.	https://www.floodark.com/

Installed AC Engineering raised beds	

# Suppliers Successful in Tender (no resulting installations)

The following suppliers were selected but for reasons as stated were not successful in acquiring orders/installations.

Organisation	Туре	Description	Website Link and Reason
Rain Catcher	Supply and install	A large national rain and grey water harvesting consultant, specialising in the design and supply of a wall hanging flat rain harvesting tank known as a 'rain catcher'	https://raincatcher.co.uk/  One resident selected but then the order was cancelled due to the product requiring an open drain. Administration fee charged
OTA Water Analytics	Supply and install	Domestic and large water systems and SuDs	http://www.overtheairanalytics .com/  Supplier unable to sign the contract because the requested insurance terms exceeded level of cover and to change would be expensive. This product was procured via Guttermate

# Suppliers Unsuccessful to Tender

The following suppliers were not selected to be invited to contract

Organisation	Product/s	Reason Unsuccessful	Image of Product/s
Free Flush	Range of products	Did not complete the relevant documentation	
Plughole Planters	Takes discarded acrylic baths, and shower trays, that would otherwise go to landfill, and create SuDs	Expense and size	

SUDs Planters	Retro designed wooden SuDs planter	Expense and size	
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### Suppliers Who Did Not Respond (invite to tender)

The following suppliers were approached but did not reply to the invite to apply for contract.

Organisation	Product/s	Weblink
Anchorage Trust	A charity in Great Yarmouth	https://www.govserv.org/GB/
	supporting young people 18-30	<u>Great-</u>
	who are homeless or at risk of	Yarmouth/1083436848338616
	homelessness to achieve positive	/Anchorage-Trust
	change	https://benjaminfoundation.co.uk/
Rainwater	Below and above ground SuDs	https://www.rainwater harvesting
Harvesting		.co.uk/
Even Greener	Supplier of a range of Water	https://evengreener.com/
	Butts	
Holmes Builders	Builders	http://holmesbuilders.co.uk/
3pTechnick	Supply and install rainwater	https://www.3ptechnik.co.uk/
	systems	

### **Products**

Once contracts were signed, a decision on which products should be offered to the residents followed.

### Range of Products

A wide range of quality, well designed and attractive products were carefully chosen in place of cheaper, lower quality that would not be as durable. A wide range of products enabled the project to test water butts/raised beds that worked and those that did not so well. It also offered a range suitable for the differing size of properties and gardens. The Great Yarmouth area consists of many small terraced houses where the downpipes flow the rainwater directly onto the road.







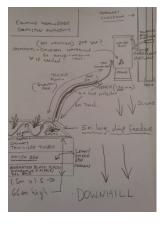


### **Products Selected**

An Option Pack containing an option leaflet and invite letter was drawn up for interested residents. The pack was adapted as the project progressed and products were de selected because of issues or non-availability.

### Installation







Phase one prior to the signing of contracts, a school made contact and enquired about installation of a wooden raised bed for 'Science Week'. The project contacted a local MIND charity hosting a piece of land to promote the benefits of nature and gardening. The project appointed the group members to design and install a wooden soil filled raised bed.



After time to consider technical requirements, it was reported that the raised bed would require a water butt feeding into the raised bed to enable it to be slow release. This enabled the project to test the process, design and installation process. It also promoted the project with students and parents. The school promoted the project via social media and the school's online website.

Phase two once contracts with the suppliers were signed, phase two was carried out which included a test installation with two trail blazer residents and four suppliers. This tested the process of surveying the property, ordering, products, installation, signing off and payment.



Phase three all residents, businesses, schools etc that had registered an interest were contacted to inform them that installation in their area had commenced. The process was tested with approximately ten further properties.

Phase four commenced when initial residents that had shown interest had an opportunity to respond and installation was underway. Orders took place as and when, on request from this point. Engagement and promotion of the project continued throughout the project.

Phase five was the final promotion and installation to council tenants. Council permission had been deferred due to long term sickness and concerns around maintenance and legionella. It was near to the project end once these had been resolved. There was little take up. A trailblazer resident was identified by the Gorleston Community Engagement Manager. Lessons learnt from the installation to private residents had shown that take up increased once installations expanded.

### Installation Process:

All carried out by Project Officer

- Respond to initial contact sending invite to survey letter and options pack. The option pack explained the process, provided the models available and a copy of the agreement
- o Arrange survey
- o Survey takes place, recording images of the down pipe, gutter and ground location
- Ask resident to sign agreement, particularly agreement to share contact details and images
- o Send confirmation to resident of option/s and order
- o Complete works order attach images and send to relevant supplier/installer
- o Once installation has taken place, visit arranged to sign off installation and images taken
- o Sign off or arrange resolution of remedial issues
- o Organise payment of invoice when signed off
- o Order, options, invoices, installations, payments recorded on a database

In most cases products and installations were carried out well. Suppliers were contracted to include installation where possible. Where it was not possible, the supplier contracted with local organisations or the project commissioned a reputable organisation.

Where installation and the products were not successful it tended to be when the supplier contracted a local contractor to carry out the installation on behalf of the supplier.

In some cases, installation required remedial repairs because the products and fixings were either not installed correctly, or the product/fixings were inappropriate causing water butts to fall off the wall, leak or over fill. The issues around products and installation was extremely time consuming for the supplier and Project Officer. Many of the issues around and installation came from inappropriate and ill-fitting bolts, screws and brackets either supplied by the manufacturer or used by the installer. Leaks tended to be caused by faulty manufacturing processes or ill-fitting fixtures or inappropriate sealants. Some products were delivered faulty but installed. Most issues were early installations by an inexperienced and inappropriate contracted installer from one supplier. Issues regularly took several attempts to be resolved. This had a negative effect on the reputation and take up of the project. However, the development of relationships with residents and quick reaction meant that the damage to the project was thought to be minimal.

# 3. Lessons Learnt

Lessons Learnt - Great Yarmouth Water Butt Project		
Initiation		
Project Team	Appointing a Project Officer with detailed knowledge of the area and understanding of the communities has enabled the project to set off quickly. The Project Officer had lived for many years in the area including living in some of the poorer communities	
Steering Group	Ensure partners agree and understand roles and responsibilities at the commencement of the project	
Charity Lead	Enabling NFF as a charity to lead progress has enabled the project to commence and progress quickly. Local Authorities and Water Companies are often burdened with laboured processes and procedures	
Partnership	It is important that the partners are on board and available for decisions and provide required information and attend meeting as required, for the project to progress	
Project Manager	Appointing an experienced qualified but flexible Project Officer has helped to the success of the project staying to time, plan and in budget	
Steering Group	Technical expertise and other subject experts were valuable as a resource	
	Communication	
Stakeholders	Identify and understand stakeholders and maintain relationships. In sizeable organisations identify key contact.	
Community Agents	Working with the Council's community agents and other agencies has provided information on the communities and information on flood initiatives/strategies. It has enabled the Project Officer to join community events and pop ups and build relationships with the agents and residents. It has also awakened and promoted awareness on flood resilience in the region. It promoted trust in the community by being introduced by the agencies.	
Pop Up Information Events	Pop ups are legal if you are not selling on the roads and just handing out flyers. The project has shown that times should	

	differ ie morning for school traffic, lunchtime shoppers and school pick up.
Messages - Target Audience	Initially the message was about flood prevention. Unfortunately, many residents felt they were not at risk and so did not respond. However, by amending the message to 'you could help your community and receive a free water butt and / or raised flower bed' increased interest. It became clear that the project was targeting residents not at risk and located higher around the flooded areas. The original message was not reaching the right target audience.
Messages - Maintenance	Initially the project agreed to maintain the products, but this became problematic and so the message changed which may have caused confusion. Only one resident mentioned this.
Flyers/Posters	The project has designed different flyers/posters depending on the area and message. The Northgate Resilience Group along with Councillors redesigned the flyer for their area. They preferred a written message and felt the original flow diagram was difficult to understand. The flyer/poster for the other areas were also amended to match the message as it changed. It also commenced as full colour, but this became expensive and so a design with low colour and impact was designed. Also compacted the design onto one page helped reduce print costs. The first print was commissioned out but thereafter printed by the project officer as this was also cost effective.
Commencement of installation	Key stage in communication. Understand what and when you will be communicating and your message. A large conference or workshop could help spread the message. Also try to attend installations and engage the neighbours in the area.
Events	The Project Officer attended most events in the scoped locations.  To draw residents to stalls offered biscuits, sweets. A small water butt was on show and a sign showing the word FREE. The Officer also walked around the events talking to stall holders and visitors.
Residents show of interest	Long length of time between residents showing interest by providing their contact details and installation. Evaluation will show if this had a negative impact.

Door to Door	Door to door has not been as successful as initially thought. Few are at home in the day and if they open the door, they tend to be nervous, suspicious or in a hurry ie cooking, putting the baby to bed and not wanting to talk. Flyers through doors has led to residents getting back but not a large amount. The scope was a large area and was difficult to rely on door to door alone. Many residents used the door to door contact as a method to complain about the flood situation.
Comm and engagement	Combination of communication and engagement methods were more effective.
Neighbourhood	Get to know your area, make yourself known. The Project Officer was known as the 'waterbutt lady'. Gain the communities trust. Be seen, talk to residents, attend local events.
Local	Helped the project by appointing a Project Officer from the area as the locals see the Project Officer as local and one of them.
Knowledge means involvement	People prefer to know about the technical aspects, how it works. They then go, oh yeh it is a good idea and then become involved and engaged.
Knowledge means involvement	People can get confused and then tend to look for an agency to blame. Clear communication who to contact and responsibilities required.
Message	Messages 'everyone has a role', 'help your neighbour/community' were more successful in this area than a 'free water butt'. Residents were distrustful of messages of free, even though the project had local authorities and water company's backing.
Pop ups	Get the project known about in the area. Being friendly, smiling and approachable is important, talking to children, stroking pets. Pets are a good way to start a conversation
Message	Ask those not at risk to help those who do flood was a difficult message but residents in Great Yarmouth area liked the idea of helping others in the community
Support of other agencies	Some agencies did not support the project as much as they could have, however, when chased or asked, they did inform the Project Officer of events going on.

Websites	The Charity was unable to host a website for the project and the sharing of data meant it difficult to utilise the Council's website. This held up take up when compared to the take up for a similar project in the Council.
Widespread comms	Widespread communications meant residents not eligible made contact causing some disappointment.
Relationship	Engage and engender trust with residents, that builds a relationship, helping when issues arise to mitigate any negativity.
Manage expectations/issues	Sometimes there are delays, issues or no eligibility.  Negative feelings could have harmed the project by harming the reputation and take up of the project.
Message	Ensure the message is consistent at the time, reinforcing the message.
Adapt message to audience	Use a variety of methods and messages. Will depend on area, community and motivation.
Poster/Flyer	Colour attracts. Quality, professional design essential to engender trust. Different designs attract various audiences.
Community participation	Participation of community groups to design poster/flyer engendered take up.
Marketing	Posters, radio, newspaper articles adverts were not as successful as originally anticipated. Pop up events handing out fliers provided a good take up. The most successful to encourage take up was word of mouth. Gt Yarmouth area is a close community and it is surprising how many people know each other. Families tend to stay local to each other.
Printing of flyers/posters	Be aware of costs, colour is important but can be expensive.
Difference between Council and private flyers	Having different posters offering various products depending on private or council could have caused complications. The Council was required to devise a message why Council tenants did not have the wide choice of water butts in the way private did.
Flyers/Posters	Improved as project progressed, reflecting lessons learnt, messages and target audiences.
Original flyer	A few residents were attracted to an image of a raised bed on the flyer, however, but the product was not available.  This caused disappointment. A note by the image until the

	project was aware of the products procured could have mitigated this.
Pop ups	Researched legality of handing out flyers on community streets. Legal but if outside a business must gain permission or if on owner's property.
Logos	Ensure logo requirements of partners is agreed early on, particularly funding partners.
Images	Ensure have permission to use images used or taken. Also ensure get a bank of images that can be used. It is difficult to have effective communications without a selection of images.
Elderly residents	Elderly residents tended not to have email, other methods were therefore used ie mail, telephone, in person. Many older residents, who showed good cognitive signs got confused and forgot what ordered or changed mind, this caused issues with delivery and installation and could be time consuming.
Events	Events attended often had low turnout.
More time, bigger campaign	The project could have benefitted from more time and to have a bigger media campaign.
Initiation media campaign	Campaign to promote project before door to door could have engendered support and trust when commencing door to door activities.
Flyers/Posters	Amended flyer to include products on offer which increased take up as images were of the WBs on offer and attractive.
Showed interest but not responded	Residents who signed up showing interest and did not respond were contacted several times, via email, post and by hand depending on the best method for the resident
	Stakeholders
Partners	Helpful to have large organisations as partners as the public recognise these bodies. However, the public also like to work with an independent ie Charity, as they often do not have a good relationship with the larger bodies. The larger organisations give a stable backing to the project.
Council and Private	Contacted Council Community Agents and attended events and pop ups. This involved Council tenants which we did not have permission from the Council to install at the time. We could only take down names. One resident made

Council Permission	contact and had a water butt installed once we had permission.  Gaining Council permission to install water butts at Council properties was time consuming and labour intensive. It was difficult to persuade the council to take part. Key barriers were risks around damage to property, Legionella, 2m rule.  It was extremely difficult to contact with Housing
Housing Association	Associations ie Orbit and although many messages were left, none replied.
Ir	mpact/Effectiveness/Value/Benefit
Awareness and action	Burgh Road and Beccles Road during the initial scope visit highlighted the substantial flooding issues both from surface and a dyke behind the residents. It also showed the great anxiety and suffering caused by this and the anger towards the big agencies. The NFF Project Officer's continued interest, support and request for updates ensured the issue was not forgotten and gave the residents a renewed strength to continue to ensure issues were resolved. I was present at the meeting when the residents attended a Councillors meeting to protest about the flooding and the Councillors agreed to ensure the flooding was resolved re the dyke.
Resilience Group	The North Yarmouth resilience group was the last remaining group in the Gt Yarmouth area and were struggling to maintain interest and had not met for over a year until this project. The project has re-envigored the group and interest in flooding in the area.
Engagement out of scope	Edward Worledge school is just outside of the scoped area by under 1 mile (Southtown). By working with the school and funding an instillation, it has raised awareness of the project. Many children who attended the school lived in an area that was in scope. The school is in an area that has not been highlighted as in scope but is significantly at risk of flooding and the residents are dissatisfied that they are not in scope. This has helped relationships with this community.
Burgh Road/Beccles Road	Raised awareness of flooding in the area and impact on the community including businesses.

Terraced houses	Drainpipes tend to go straight onto roads, running down to lower properties. However, smaller products were not so available.
Influenced manufacturing	Through project feedback some suppliers and manufacturers were able to re design products.
	Contracting / Legal
Contract and other provider documentation	Appoint solicitor to draw up supplier contracts as soon as possible as this is time consuming and could mean that suppliers are left waiting to provide a quote. It also means residents are left waiting after recording their interest. The project commenced engagement and identification of suppliers long before a contract and other documentation were understood and drafted. It became necessary to maintain relationships with the suppliers and residents while the documentation and legal aspects were finalised.
Letter of Agreement	By fully understanding local residents it became clear that a formal contract would deter many residents from having a water butt and or raised flower bed installed. The project called it a 'letter of agreement' and strived for it to be simple and easy to understand.
Specification / scope of works	It became clear that the project required a detailed understanding of what was required in way of products, specifications and legal requirements. A specification /scope of works was drafted and shared with the suppliers for feedback. It became apparent that liability and insurances/warranties could become an issue with some suppliers.
Appoint solicitor	A member of the charity provided advice and support in developing a requirement spec and information sheet for solicitors, and suggested a few solicitors that could be contacted. The project then developed an information pack and forwarded to solicitors and drafted a scoring and response sheet to enable selection.
Insurances	Think about type of contract and liability/insurances required. Some too expensive for suppliers. Some suppliers found it difficult or expensive to have certain insurances.  One organisation was unable to participate because of this.
Liability	Another way to mitigate liability was to draw a contract up with suppliers so the liability mostly laid with them.

Scope of works	Produced an introduction and scope of works/requirements for the solicitor to be able to draft the contract.
Share scope of works with suppliers	Sharing draft of scope of works with suppliers at start was helpful as they provided feedback what was possible and could be an issue ie liability insurance limits.
Contract	Supplier contracts were based on a standard commercial contract, on a as required basis. Liability and warranty with supplier/installer.
	Supply, Deliver
Technical Trial	Tested technical understanding and usability by funding an installation at Edward Worledge School. It has provided a trial to understand how the theory worked. A water butt was attached to the drainpipe from a classroom. The overrun drained into the raised flower bed. The overrun connected to the raised bed underground. The children supported the building of the system as part of science week and will continue to garden/maintain the raised bed. The system was installed by locals who attended Community Roots/MIND who have an allotment and wooded area close by. Supporting local charities, residents and schools.
Provider split in product offer	It became clear that some suppliers were interested in both supply, deliver and install while some were only able to offer supply. This meant consideration when developing both the process and 'request for quote' pack.
Values	Understand release values early on and how you will measure them.
Number or quality	Decisions around whether to go for number over quality ie smaller amount of good quality that lasts longer and are attractive over large numbers of basic less sustainable products. Residents are more likely to care for and keep good quality attractive water butts.
Delivery	Some residents were not informed of delivery and were not at home when delivered risking the asset with damage or being stolen, particularly when left near the roadside. It was made clear to the supplier/installer that it was their responsibility if the water butt was damaged or went missing.

Delivery	Delivery details put the Project Officer's personal details down so they would contact personal landline and leave messages with husband. This was also shared with the residents as it was included on the delivery information which led to residents contacting the Project Officer via her personal landline. This was an issue.	
	Suppliers/Installation	
Slow Release Mechanism	Initially there were two providers identified by Norfolk County Council providing slow release mechanisms for water butts. One had ceased manufacturing slow release. By searching the web and developing relationships and conversations with potential suppliers the project was able to speak to suppliers who developed slow release mechanisms.	
Attract suppliers	Advertisement to request suppliers to contact if interested would have been a good way of identifying suppliers. In this instance the Project Officer searched online and contacted suppliers. Other suppliers heard of the project and contacted the Project Officer.	
	Products	
Offer choice or not	The products initially offered were wide to ascertain the	
Offer choice of flot	products which were popular and effective. The range was then limited based on this information.	
Poor design and quality	Some products were poorly designed and manufactured. This did not impact the choice of the resident but did have an impact on the installation quality and perception of the project. Feedback was given to manufacturers and suppliers that influenced future designs and production.	
Poor design and quality	One design had an area of stored water not accessed. This was a poor design, but the water did not become stagnant because of the freshwater circulation. Some water butts had large marks made in production. One design was incorrectly manufactured which caused overflowing. The nuts and bolts provided were inadequate and caused the product to fall off the wall and leak. This product was removed as an option because almost all installations had issues associated with this design.	

Filter	Filter required to ensure debris/silt does not block up the water butt.
Maintenance	Maintenance was important to the sustainability of the product. Instructions, demonstration and leaflet was provided by the supplier/installer during installation.
Different models/sizes for different situations	Houses, gardens, drainpipes and drains come in different shapes and sizes. This meant that different sizes and models were required to meet the different requirements.
Raised beds	Initially, when residents expressed an interest, raised beds were the more popular request. Both metal and wood raised beds were offered. The metal raised bed, was manufactured as a SuDS product but tended to be more expensive. This model did not offer a tap. One resident refused the product after installation because required it to water the garden. The manufacturer responded to feedback but at this time was unable to design a model with a tap because of technical issues. Wooden raised beds had a basic water butt fitted but the combined unit were large for most gardens. A metal raised bed with a tap that was available in different sizes and cost effective would have been a popular choice.
Demonstration products	Provided with an example by one supplier. Also purchased a basic model from a well-known store. Showing a water butt at an event tended to attract residents.
Silt build up	There could be an issue of silt build up, particularly where water butts have a space towards the bottom below the tap. The filters tend not to filter smaller than cherry pips etc.
Water butt colour	The colour grey was a popular request, but most water butts were not available in this colour. One resident painted a black wall hanging water butt grey. Permission was not requested. It was considered not an issue.
	Installation
Installers	The installers were recruited/provided by the suppliers, with the premise that they would be best to install their products.
	One supplier employed a local heating business with no prior knowledge of installing water butts. The supplier

	struggled to contract a professional fitter in the area. This caused many issues with the installations. Most installations carried out by this installer led to remedial repair work eg leaks, poor fitting installations, shabby workmanship, left untidy work areas etc. They were also irritable to some residents, commenting that they did not want to be there. Installation with issues were monitored and took time to resolve, often taking several attempts and visits to resolve the issues. This was time consuming and probably affected the reputation and take up of the project.
Manufacturing	Long delay with supply in some instances due to demand because of time of year. This coincided with demand for the water butts from our residents. Most residents happy to wait. Ensured residents kept up to date but at times this was difficult because the supplier was not keeping the Project Officer up to date.
Downpipes	When additional brackets were not fitted the down pipe was likely to pull away from the guttering or slip down near the water butt causing leaks or heavy downpour of water. Brackets were the best method to resolve this rather than a screw in the pipe which would rust. Square downpipes were particularly susceptible to slippage.  Downpipes can come away from guttering caused by the movement of sawing or poor fitting or lack of additional
Slow release valve	There were several commercial slow release mechanisms fitted to SuDS. The main retro fitted slow release mechanism was a pipe using a tap to control the flow. This leaked and was easier to be tampered with by residents and so a metal valve was fitted to the outlet pipe. The slow release valve sometimes did not allow flow. It was difficult to identify whether this was because of resident's changing the flow or the pipes getting blocked. Some pipes did not release the water causing the water butt to become full or some released the water too quickly which defeated the project's objective of slowing the water going into the drains.
Slow release	Many down pipes went into a concrete flooring which meant the drain was sealed and covered. The project resolved this this by drilling a hole and inserting the slow release pipe and other pipes into the downpipe. This meant that the concrete did not need to be broken up and the

	slow release went into the drain and not onto the pavement.
Retro fit	It was difficult persuading residents to change their existing water butts to slow release. This was mainly due to not wanting an additional hole made in the water butt they purchased.
Cost	Installation was expensive from £70 to £270 per water butt. This was much more than originally anticipated and impacted the number of water butts installed for the capital of £50,000. However, this remained a cost effective method of helping reduce the risk of surface water flooding.
Promote project as installation takes place	It was not practical to promote the project during installations because one supplier gave no notice. Other installations were in bulk but fitted in different roads. It was impractical to be present at all installations when they did not focus on one road at a time.
Communication / updates	Poor communication and updates by one supplier. No notice installation was to take place, when it had taken place or when issues resolved.
Slow release	What could we have done differently?  If the project installed the products in place of the supplier?  It would have meant more liability for the project.  If the project did not offer fitting there would have not been a guarantee that slow release was installed and correctly.  There was also no guarantee the water butt was fitted.
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	Funding / Budgets
Funding	Ensure that the extent of funding required is calculated, agreed before the commencement of the project.
VAT	It became apparent that the project required to understand the issues and savings around VAT. VAT became an issue with NFF and Anglian Water. It was important that the funding was a Grant and not be eligible for VAT.
Capital/take up/installation	£50,000 capital provided approx. 141 good quality water butts/raised beds this included installation.
Bulk	Bulk order of basic water butts would have been cost effective but may not have been as robust difficult to

	encourage take up in Gt Yarmouth. A lot of residents who took up installation also had a basic water butt.
Expense per product	More expensive per products than anticipated because of installation and additions.
	Procurement
Process	Process was lengthy identifying suitable suppliers/installers, drafting scope of works/requirements, identification of solicitor, draft contracts and letter of agreement, application form, selection process, confirmation and signing of contract. Reviewing, answering and resolving queries.
Local businesses/charities	Contracted with local businesses charities etc for installation, supply and design where possible.
	Liability/Accountability
CIC	Liability became an issue. This was overcome by amending the CIC. This would have been difficult for a LA or water company to do.
CIC	The formation of the CIC was both costly and extremely time consuming. Bank account was required to be created.
Damage/Issues	Think early who is going to be responsible for accidental damage, issues post installation of product and installation.
General liability/contract	Think who is the contract between ie Council and resident or installer/supplier and resident? Ensure relevant insurances are in place for any liability.
Private landlords	Possible issue with private landlords receiving free products but the project agreed that the project was about helping residents at risk of flooding.
Product stays with property	What happens to the products when a house was sold, or the present resident moved away? - this project agreed water butts remained the property of the building and stayed with the building if a resident moved. This was embedded into the letter of agreement.

Warning stickers	Warning stickers were placed on the product to warn about using a hose pipe/sprinkler and drinking water and advertise partners of project. Most were placed on water butts, some at the back of the product. Some residents were handed to place on the water butt.
Legionella risk	Legionella from drinking water or sprayed water from the water butt was a small risk but to counter this risk not to drink or use a spray hose pipe from the water butt was placed within the letter of agreement, noted when warning sticker handed to resident for each water butt.
Relationship between resident and supplier	Originally thought the Project Officer would have limited contact between supplier and resident when issues arose. This became a time-consuming issue, resolving all the issues that arose with one supplier/installer, installations and upset households.
Identification	ID required to be shown.
Police check	DBS required for suppliers/installers when in schools or other sheltered housing etc. When this was not possible the installer installed at a school during school holidays or discussed with the relevant manager.
	Schools
Taka un	
Take up	Schools initially showed interest but then only three took part
Selection	Two chose wooden raised beds linked to basic water butts, the other, an infants/primary school chose colourful water butts across the site.
Promotion	Schools reluctant to promote project, confirm they would but not see action
	Scope
Large scoped area	Scoped areas to protect a small number of homes was large
Scope	Ensure you are aware of the scope early on
Full area report	Carry out a full report on the area, include the drains, flow, drainpipes, low and high lying areas, road systems, past and future planned work, population, flooding, responsible agencies and officers, councillors, key residents, products that would work, extensions, size of front and back

	gardens/yards. Pavements and steps. Climate and weather trends.
Requirements/specifications	A strong scope of works/requirements/wish list is important ie how long should the product last, designs, technical specifications
What will be provided and not?	Agree early on what will be included and not ie flowers are not included. Also think about soil for the raised beds.
Downpipes	Metal and cast iron down pipes excluded as could cause damage to the pipe when cutting into.
Downpipes/gutters	Downpipes must go into a drain and not into a soak away
Garages/extensions	Downpipes off garages and extensions were acceptable as the flow would make a difference.
Options	Options provided for residents to select from, to suit most situations, requirements, locations etc and to encourage take up.
Drains	Permitted if downpipe goes onto road or drains.
	Measure success
Impact of other	Other work and measures within Burgh Road/Beccles Road may influence results.
Effectiveness	Without a reliable measure it is difficult to have evidence that the project slowed the flow of water into the drains. However, it is possible to estimate the impact.
Measure	34 installations would save 1 property it was calculated.
Cost effective - cost per volume	Possible measures - cost effective - cost per volume.
Possible measures	Measures are difficult but could include: - Does it work? - Telemetrics - What worked - Uptake - Flow into drains, including historic data re flow into drains
Flow rate	Difficult to identify a reliable method. Pre project flow measures were required and not available. Cost effective

	flow measures not widely available. This is being worked on by Anglian Water.
	Doc's at
	Project
Documentation	Critical project communication strategy and analysis carried out early on.
Steering Group	An engineer on the steering group helped with technical understanding.
Resources/skills	One Project Officer – carried out all tasks and project managing roles. Resource intensive, at times would have valued support. Project required an all-round skilled person ie communication, flyer designer, sales-person, individual to engender trust, listening skills, finance, legal etc.
Flexibility/initiative	Identify motivation and needs and be flexible. Be innovative, think outside of the box.
Structure	Project structure important to maintain the direction of the project ie steering group.
	Board – Governance, directed project. NFF CE Sponsor directed Project Officer. Project Officer carried out project.
Aims/Objectives	Early decision on outcomes and measures essential for success of project.
Test Phase	Test phase of a sample was helpful to identify what worked and did not re installation/supply and all processes. Phased stages worked well. Maintained control.
Processes	Design and implementation of processes ie sign off process, were an important part of the success of the project.
Flexible project plan	Found that having a flexible project plan gave ability to adapt to the needs of the project and residents as it transformed.
	Talia IIIa
	Take Up
Overall uptake	Houseowners reluctant in Gt Yarmouth to take up, particularly basic water butts, however, Norwich take up was larger - why? Residents needed to be persuaded to take up. Lots of comms involved and development of trust.
Who takes up and do not and why	Middle aged residents tended to take up offer. Few take up from poorer, younger and older age group.

Choice - Incentive	Provided choice including well-made attractive products to encourage initial take up.
Practicality - Incentive	Designed so 1/3 water remains for household use. This was anticipated as a requirement to attract residents. This became a requirement by the residents as they required the water butts for watering the garden.
Gardeners	Those who took up mostly had well-kept gardens and required the water butts to enhance the garden but also to provide water for the garden. One resident asked for a raised bed to be removed because it did not have a tap.
Apathy	Some areas of poverty and apathy probably reduced take up. Many residents rent properties and not interested in water butts, particularly when there are other priorities. Two residents take up were where homes were privately rented.
Local resources	The ability to confirm that local businesses/charities are used is a good positive message that encouraged take up.
Homeowner satisfaction	Depended on installer and product and nature of resident.  Overall, satisfied.
Best method to spread word	Word of mouth most popular method of take up particularly when it is positive feedback from friends, family and neighbours, damaging when negative as it is a close community.
Optimal time of year	Optimal time of year to advertise - Spring summer. Take up increased around spring which affected availability of product.
Trailblazers/champions	Champions identified to test the process and spread the word worked well in a community.
Action Groups	Leicester Road uptake disappointing – no interest except Lowestoft Road area. Action Group may have been a better way forward on this road.
Time and patience	Can take time and needs patience to encourage take up.
Wh	at could have been done differently

Basic water butt	Offer of a basic water butt in a range of sizes.
	-
One effective installer	Procure one quality installer or one organisation supplying and installing all water butts.
Scope	Scope re areas was too large to enable a focussed hit on an area. This meant a sporadic take up.
Events	Held an information event in the areas to promote the project may have worked well.
Incentives	Should incentives have been used?
Available to pick up	Residents may have taken away water butt if available at an event?
	Opportunities for the future
Design of water butt	Design and develop effective water butt - grey, not plain or fancy - mid range
Different scoped areas	Include other areas of Gt Yarmouth ie Southtown who are at risk of flooding.
Flood Action Groups	Develop flood action groups in scoped areas particularly Leicester Road and Burgh Road. Leicester Road uptake disappointing – no interest except Lowestoft Road area. Action Group may have been a better way forward on this road
Spread the word	Distribute the success of the project outcomes to other local authorities, businesses, EA and water companies.
Retro fit	Campaign for residents with existing water butts to be fitted with simple slow release mechanism. Project fit or resident can fit.
New housing	New housing estates under way - work with architects, builders and residents to help reduce the risk of surface water flooding.
Communication or study ie what public want?	Use of charity to make contact, communication with residents and businesses as trusted and impartial.

	Technical
Extensions	Most drainpipes are on side of property where the drive is located or footpaths.
Slow Release	Ensure residents are aware of the slow release immediately so no surprises. Not come across anyone unhappy with this once explained although some are shocked when they notice the water being released and report this as a fault. Some may even stop the slow release without mentioning this to the Project Officer.
Extensions/sheds/garages	Important to recognise that the flow off of sheds garages etc will be less than the main roof, bearing in mind the size, flow and requirements of the resident ie if using the water butt for the garden may need to have a larger water butt installed to the down pipe off the main roof.
Timed slow release	This mechanism was of interest but expensive.
Original scope	Original thought was - approx. £125 per house, 400L protection but this was changed. Residents were attracted to colourful more expensive water butts. Urban tended not to have the space for larger 400L water butts.
Slow Release	At times unable to find the appropriate flow to satisfy the resident and the project. Slow release pipe either lets out too quickly or not at all.
Slow Release	Drain time thought to be over 1-2 days.
Slow Release	Agreed slow release pipe could lead onto the yard if it leads to the road. Liability taken by resident.
Cast iron downpipes	Out of scope. When come across old downpipes ie schools, we offered to provide the products and they install.
BSI standards	Investigation showed that there are presently no BSI standards.
Soakaway	Unable at times to identify if a drain was closed or a soakaway.
Owner of product	Original plan was aimed at low cost of supply and installation. As they become more expensive then it was important the products remained at the property for a length of time.
Warranty	Ensured warranty with installers/suppliers.
Maintenance	Maintenance responsibility of resident/property owner.

Residents sent parts	One supplier/installer sending out parts for residents to install when issues.
	Environment
Environment	Intensive often downpours.
Hard surfaces	In built up urban areas the gardens are small and usually hard surface ie concrete.
Plastics/Recycled products	Considered public awareness of plastic at the time and so within the specification preferred recycled plastic. Other products ie wood, metal also used.
Water run off	Concerns were raised about poor-quality water runoff from roofs. However, would lead to a drain in the normal manner.
	Sign off process
Sign off	Sign off once it had rained was advised to highlight leaks etc.
	Doot week to the control of the cont
	Post project
Monitoring	Agree early on monitoring of installations and products and how to do this ie questionnaire, visits, could utilise students etc. Lack of resources means this is unlikely.
Property sold process	Process for when a resident leaves the property and how to ensure the water butt remains. Lack of resources means this is unlikely.
Satisfaction	Good satisfaction rates on survey questionnaire.
Issues arising	Will suppliers respond to issues when project finished?
	Issues
Tap, valve and other entrances/exists of the water butt	Tend to leak and can take several attempts to stop the leak.
Downpipe	Can come away from guttering caused by the movement of sawing or poor fitting or lack of additional brackets.

Water butts overflowing	Several water butts overflowed significantly.
Water butts	Some models tended to leak or split when under pressure.
Slow release pipe	Some pipes were not installed so the resident had 1/3rd of the water, the rest flowed out.
Drains	Some slow release pipes were not installed into the drain and left onto the pavement.
Landlords	Landlords were required to sign agreement. Possible clash that commercial landlords should not receive free products. However, about benefitting everyone

### 4. Key Outputs

#### Outputs

Outputs
Scope of works
Letter of agreement
Legal supplier contract
Flyer/poster
Project Plan
Lessons learnt
Issues arising
Tasks log
Decisions log
Steering group
Terms of reference
Scope log
Risks/issues log
Communication strategy/plan
Procurement process
Selection process
Presentations/powerpoints
Purchase/work orders

Sign off document
List of interested residents
List of orders/invoices
Amended CIC legal documentation
CIC Bank account
Option pack
Maintenance sheet/directions
Survey checklist
Case studies pro forma
Warning labels/stickers
Video/film
Post project questionnaire
End of project report
Case studies

#### **Option Pack**

Options Pack - original version shown as below at the commencement of the project. This was amended as options changed due to availability or issues raised with products









# SLOW RELEASE WATER BUTTS AND RAISED FLOWER BEDS

# **Your Options**

Working with you to reduce flooding in your community

#### 1. Choosing the most appropriate water butt or raised flower bed

Thank you for showing interest in having a water butt or raised flower bed installed.

This project is funded by Anglian Water, Norfolk County Council and the FRAMES project of the North Sea Interreg programme and delivered through the NFF Trading Services C.I.C to test new approaches to flood risk management.

The water butts and raised beds are especially adapted so they capture water when it rains heavily and releases it slowly when the storms have passed, controlling the flow of water on the roads, reducing the risk of flooding in peoples' homes and businesses. There will be water left in the water butt for garden use.

Please find in this booklet a selection of the water butts and raised flower beds we can offer.

The Water Butts and Raised Flower Beds come in all shapes, design and sizes.

Please think about your garden and the best place the equipment should be fitted. It will need to be fitted to a drainpipe that leads to the drain. In some cases, you can extend where the water butt is situated by using an extension pipe.

The Project Officer will work with you to agree which water butt or raised flower bed is most suitable.

We will do our utmost to provide and install the water butt or raised flower bed of your choice, but we are unable to guarantee this. Please also note that not all products will necessarily be available at all times. We will however discuss the reasons with you.

#### A Range of Water Butts and Raised Flower Beds we can offer:





#### Model 1

Green (A) or Black (B)

Wall Hanging

Dimensions Capacity 200 litres Length 1,150 mm Depth 200 mm Height 1,150 mm





Model 2 Water Butt -275 (2.1) or 800 (2.2) litre Granite (A), Sandstone (B) and Charcoal (C) Height: 105cm, Width: 79cm, Depth 41cm

Model 3 Planter - Height: 50cm. Width: 80cm. Depth: 50cm. Other dimensions available



#### Model 4

2 tier – 134 litre
Terracotta (A) or Black (B)
or Light Green and Black
(C) or Dark Green and
Black (D)
1230 mm x 530 mm x 490
mm

#### Model 5

3 tier – 268 litre
Black (A) or Terracotta (B)
or
Light Green and Black (C)
or Dark Green and Black
(D) 1670 mm x 530 mm x
490 mm







Model 6 The Rain Garden Planter

1000 x 350 x 550 mm

Dark (A) or Light Grey (B) or White (C)



#### Standard Barrel Water Butt

**Model 7** 100L

Width: 40cm Length: 40cm Height: 91cm Height with Stand:

118cm

Model 10 250 litre 51cm Depth: 51cm Height: 102cm Height on

Stand134cm

**Model 8** 150L

48cm Depth: 48cm Height: 90cm Stand Dimensions: Height:

28cm

**Model 9** 230L

Width: 59cm, Depth: 59cm, Height: 90cm
Height on Stand 122cm



Model 11 Terra cottage Wall mounted Water Butt

160 litre

Height: 122cm Width: 45cm Depth: 30cm



Model 13 203L (A) & 300L (B) Square Water Butt Height with Stand: 115cm Width: 70cm Depth: 70cm Capacity: (45 UK Gallons)



Model 12 Garden Lake Water Butt

200 litre

Width/Diameter: 68 cm Height Alone: 90 cm Height with Stand: 120 cm



Model 14 180 Litre Garden

#### Planter Water

985mm (Height) x 600mm (Diameter), Bowl 170mm (Height) x 520mm (Diameter)

Weight: 10kg

Bowl capacity: 32 Litres, Water butt capacity: 180

Litres.

Butt Sandstone (A) Terracotta (B), antique stone (C), blue stone (D), black (E), grey (F), white (G), pink (H), green (I)



Model 15 Castilla 190 Litre Rain Barrel

with tap

Height: 84cmWidth: 61cmWeight: 6kgs



Model 16 CURRENTLY NOT AVAILABLE



Model 17
Built to measure raised bed –
1.5m x 1.5m x 66cm – available in other sizes and designs



Model 18 Rattan Wicker Effect 150L Available in eight different colours. Black, blue, green, oak brown, orange, pink, purple and red. Height: 127cm with stand, Diameter: 52cm

#### 2. What we expect from you

We will ask you to read and sign a 'Participation Letter of Agreement'. This is a simple letter that asks you to agree to a few points of importance. Please see an example below. The Project Officer will be pleased to discuss this with you.

#### **Example of 'Home Owner Participation Letter of Agreement'**

#### Letter of Agreement



#### In Partnership with







Name
Address
Product/s installed
Provider

- o I/We are the owner(s) of the premises ("the Property") at the above address or we have the agreement of the owner(s) of the Property a copy of which is attached.
  - o I/We hereby agree to the installation by the Provider of a water butt/raised flower bed (strike out as appropriate) ("the Equipment") at the Property. The installation will include adjustments and incisions into the drainpipes at the Property and potentially other remedial works, which will be agreed with me/us prior to being carried out.
  - o I/We agree that I/we will maintain the Equipment and connecting pipes in a state of good repair.
  - o It has been explained to me and I understand what is meant by the 'use of', 'good repair' and 'maintenance' of the equipment that has been provided and installed.
  - O I/We understand that I/we should not drink the water, attach a hose pipe to the product or climb on the product. That the product should be emptied and cleaned at least once yearly and that the product is not a danger to myself or others including during maintenance.
  - o I/We agree not to remove the Equipment from the Premises without the agreement of the NFF TRADING SERVICES C.I.C, and that if I/we do require the Equipment to be removed, we will contact the National Flood Forum in the first instance.

- o I/We understand that should I move from the residence the water butt/raised flower bed (strike out as appropriate) will remain at the property in a good working order. I will also inform the new resident that they should contact the NFF TRADING SERVICES C.I.C.
- o I/We understand that if there are any issues with the Equipment or its installation I/we will contact the Provider directly at the following address:

#### [PROVIDER/INSTALLER CONTACT DETAILS]

- o For the avoidance of doubt, we agree that none of National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council or Anglian Water will be liable to me/us for any act, omission or negligence of the Provider in carrying out the installation of the Equipment and any such liability will belong to the Provider.
- o I/We understand that after the installation the National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council or Anglian Water will retain your details but they will not be shared with external parties and will only be used in relation to this project.
- o I/We understand that the National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council or Anglian Water and their officers will share your contact details including address, email and telephone; and images relating to the installation of the product, with the organisation supplying and or installing the product/s.
- o I/We understand that the images of the installation may be used by the National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council or Anglian Water to promote the project.
- o I/We understand that a representative of the National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council and/or or Anglian Water may contact me/us for the purposes of visiting the Premises to carry out a review of the Equipment and its installation.
- o I/We agree to respond to a survey/questionnaire if required by the National Flood Forum, NFF TRADING SERVICES C.I.C, Norfolk County Council and/or Anglian Water.

Signed	Name
(Owner/Resident of the Proper	ty)
Date of Signature	
Date of Installation	
	Old Snuff Mill Warehouse, Park Lane, Bewdley, 'ebsite: <a href="www.nationalfloodforum.org.uk">www.nationalfloodforum.org.uk</a> . Tel. 01299

#### 3. The Process

Initially our Project Officer will contact you to agree a time they can visit you to discuss the options, the most appropriate equipment and location to be installed. The Project Officer will take photos and notes so that the supplier and installer have an accurate picture of the location and area the equipment is to be installed.

Once this has been agreed the Project Officer will ask you to look at the 'Letter of Participation Agreement' and sign it. They will be happy to answer any questions you have.

With your permission (you will be asked to confirm by signing the Letter of Agreement) the Project Officer will forward your contact details to the relevant supplier/installer to contact you to organise a suitable date and time to install.

Once the equipment has been installed the Project Officer will arrange to come and visit to ensure you are satisfied with the equipment and installation. Thereafter you should contact the supplier/installer direct if you experience a problem with the product or installation.

Thank you and we look forward to working with you to help reduce the flooding in your community.



# **Provided**

in Partnership with FRAMES Interreg, National Flood Forum, Anglian Water and Norfolk County Council









## **WARNING**

To reduce the risk of Legionella please **do not** drink the water or attach a hose pipe

Working With You To Reduce Flooding In Your Community

Do you live, have a business or are a school in Gorleston , Bradwell or North Yarmouth? We are able to offer FREE
Water Butts & Raised
Flower Beds \*
through Partner

Funding

The National Flood Forum

is working with FRAMEs, (EU)
Norfolk County Council and
Anglian Water

Help your Community to reduce the risk of flooding

Contact Michelle National Flood Forum (Charity) 07763509439 01299 403055 michelle@flood forum.org.uk









\*Including Installation & depending on eligibility

"Slow Release" Water Butts & Raised Flower Beds

These catch water when it rains and release it slowly when the storms have passed; controlling the flow of water in the drains & on the roads, reducing the risk of flooding in peoples' homes and businesses













#### **Communication Strategy**

Suppliers/Installers (contracted)	<ul> <li>Flood Ark</li> <li>AC Engineering</li> <li>Guttermate</li> <li>Design 4 Plastics</li> <li>Roots (MIND)</li> </ul>	■ Nationwide	Email Telephone Meeting Survey
	<ul> <li>RainCatcher</li> </ul>		
Suppliers (not contracted)	<ul> <li>Tanks Direct</li> <li>Even Greener</li> <li>Free Flush</li> <li>Holmes Builders</li> <li>OTA</li> <li>Plughole Planters</li> <li>Straight</li> <li>Aqualogic</li> <li>Water Scan</li> <li>Rainwater Tanks</li> <li>Garden Street</li> <li>Green Fingers</li> <li>Water Scan</li> </ul>	■ Nationwide	Email Telephone
Steering Group	<ul> <li>National Flood Forum</li> <li>Anglian Water</li> <li>Norfolk County Council</li> <li>Gt Yarmouth Town Council</li> </ul>	•	Meeting Email Telephone Teleconference
Councils	<ul> <li>Bradwell Parish Council</li> </ul>		Email

			Meetings
	<ul> <li>Gorleston Parish Council</li> </ul>		Flyer
	<ul><li>Gt Yarmouth town council</li></ul>		
Councillors	<ul><li>All councillors</li></ul>	<ul><li>Gt Yarmouth</li></ul>	Email
		<ul><li>Gorleston</li></ul>	Meetings
		<ul><li>Bradwell</li></ul>	Flyer
Social Housing	■ Gt Yarmouth Council		Email
	<ul><li>Orbitt Housing</li></ul>		Meetings
			Flyer
Community Groups	■ PEONY (People of North	■ Gt Yarmouth	Email
	Yarmouth)		Meetings
	<ul> <li>North Yarmouth Resilience</li> </ul>	<ul><li>Gt Yarmouth</li></ul>	Presentation
	Group		Telephone
			Flyer
Agencies/Charities	<ul><li>Anchorage Trust</li></ul>	<ul><li>Gt Yarmouth</li></ul>	Email
	<ul><li>MIND Roots</li></ul>	<ul><li>Gorleston</li></ul>	Meetings
	<ul><li>Mens Shed (Email)</li></ul>		Presentation
	<ul><li>Voluntary Norfolk</li></ul>		Telephone
	•		Flyer
	•		
Council Community	<ul><li>MESH</li></ul>	<ul><li>Gorleston</li></ul>	Email
Workers	<ul><li>Comeunity</li></ul>	<ul><li>Gt Yarmouth</li></ul>	Meetings
	<ul><li>Make it Happen</li></ul>	<ul><li>Southtown</li></ul>	Presentation
			Telephone
			Flyer
Coffee Mornings	<ul> <li>North Yarmouth Methodist</li> </ul>		Attendance
			Email

Activity Groups Festivals/Fayres	<ul> <li>Pop Pin</li> <li>Diet Group</li> <li>Bowling Group</li> <li>Flower Festival</li> <li>Gorleston Cliff Event</li> <li>Carnival</li> </ul>	<ul> <li>Bradwell</li> <li>Bradwell</li> <li>Bradwell</li> <li>Gorleston</li> <li>Gt Yarmouth</li> </ul>	Flyer Poster Attendance Email Flyer Email Telephone Attendance Flyer/poster
Small Fetes/Events	<ul><li>Fete</li><li>MESH Easter event</li></ul>	<ul> <li>Bridge Road, Gorleston</li> <li>MESH Community Day</li> <li>Roots Community</li> <li>Events</li> </ul>	Email Telephone Attendance Flyer/poster
Community Pop ups (via Council Community Workers)	<ul> <li>Seahawk Close</li> <li>High Street</li> <li>Leicester Road</li> <li>Northgate Street</li> <li>Bell Marsh Road</li> <li>Burgh Road</li> </ul>	<ul> <li>Gorleston</li> <li>Gorleston</li> <li>Gorleston</li> <li>Gt Yarmouth</li> <li>Gorleston</li> <li>Gorleston</li> </ul>	Email Telephone Attendance Flyer/poster
EXPO	■ Flood Expos	<ul><li>Birmingham</li><li>Peterborough</li></ul>	Email Telephone Attendance Flyer/poster Presentation
Misc events	<ul><li>Ireact (East Anglian businesses and Councils)</li></ul>	<ul><li>Peterborough</li></ul>	Email Telephone

	Launch		Attendance
	<ul> <li>Lowestoft information</li> </ul>	<ul><li>Lowestoft</li></ul>	Flyer/poster
	flood		Presentation
	Event	<ul><li>Gt Yarmouth</li></ul>	
	<ul> <li>Marina Centre Exercise</li> </ul>	<ul><li>Gt Yarmouth</li></ul>	
	<ul> <li>Businesses in Community</li> </ul>	<ul><li>Peterborough</li></ul>	
	<ul> <li>Anglian Eastern RFCC</li> </ul>		
	Annual Review	<ul><li>Gorleston</li></ul>	
	<ul> <li>Network Lunch Comm</li> </ul>		
	College		
Site Visits (via Norfolk	■ Burgh/Beccles Road	<ul><li>Gorleston</li></ul>	Email
County Council)	<ul><li>Lords Lane/Long Lane</li></ul>	<ul><li>Bradwell</li></ul>	Telephone
	<ul><li>Leicester Road</li></ul>	<ul><li>Gorleston</li></ul>	Attendance
Flyer /Poster Drops	<ul><li>Burgh/Beccles Road and</li></ul>	<ul><li>Gorleston</li></ul>	Attendance
	areas	<ul><li>Bradwell</li></ul>	Flyer/poster
	<ul><li>Lords/Long Lane and areas</li></ul>	<ul><li>Gt Yarmouth</li></ul>	
	<ul><li>Northgate Street and areas</li></ul>	<ul><li>Gorleston</li></ul>	
	<ul><li>Leicester Road and areas</li></ul>		
Board Meetings	<ul><li>Make it Happen</li></ul>	<ul><li>Gt Yarmouth</li></ul>	Email
		Community	Telephone
		Council	Attendance
			Flyer/poster
			Presentation
Schools/Adult Education	■ Hillside Primary	<ul><li>Bradwell</li></ul>	Email (mostly)
	<ul><li>Woodside Primary</li></ul>	<ul><li>Bradwell</li></ul>	Telephone
	<ul> <li>Edward Worledge Primary</li> </ul>	<ul><li>Gt Yarmouth</li></ul>	Attendance

	■ Gorleston Sixth Form		Launch event	Flyer/poster
	<ul><li>Northgate Primary</li></ul>	•	Gt Yarmouth	Presentation
	<ul><li>Cliff Park Primary and</li></ul>	•	Gorleston	Survey
	High School	•		
	<ul><li>Hillside Primary</li></ul>	•	Bradwell	
	<ul><li>Wroughton Primary</li></ul>	•	Gorleston	
	<ul><li>St Georges Primary</li></ul>	•	Gt Yarmouth	
	<ul><li>Peterhouse</li></ul>			
	<ul> <li>Ormiston Primary and High</li> </ul>	•	Gorleston	
	School			
	<ul><li>Stradbrooke Primary</li></ul>	•	Gorleston	
	<ul><li>St Nicholas Priory Primary</li></ul>	•	Gt Yarmouth	
	<ul><li>Brooklands</li></ul>	•	Gt Yarmouth	
	<ul> <li>St Mary and Peter Primary</li> </ul>	•	Gt Yarmouth	
Out of County	<ul><li>Amanda McDermott</li></ul>	•		
	Consultancy			
	<ul><li>Glasgow County Council</li></ul>			
	<ul><li>Amazi Civil Engineers</li></ul>			
	<ul><li>Durham University</li></ul>			
Surgeries	<ul><li>Dental</li></ul>	•	Bradwell, Gorleston	Attendance
	■ GP	•	Bradwell, Gorleston	Flyer/poster
	•			
Libraries/Fire	<ul><li>Community Libraries</li></ul>	•	Gorleston, Gt Yarmouth,	Attendance
Stations/Police			Bradwell	Flyer/poster
	<ul><li>Fire stations</li></ul>	•	Gorleston, Via MESH	
	<ul><li>Police</li></ul>		and Roots Fund days	

Public	•	■ Gorleston	Attendance
Houses/Restaurants		<ul><li>Gt Yarmouth</li></ul>	Flyer/poster
		•	,
Churches	<ul> <li>Church of England</li> </ul>	■ Bradwell	Attendance
		<ul><li>St Andrews, Gorleston</li></ul>	Flyer/poster
		<ul><li>Gt Yarmouth</li></ul>	Email
	<ul><li>Methodist</li></ul>	<ul><li>Bradwell</li></ul>	
		<ul><li>Gorleston</li></ul>	
		<ul><li>Gt Yarmouth</li></ul>	
Small Shops/Coffee Shop	■ Flyer/Poster drop	<ul> <li>High Street, Gorleston</li> </ul>	Attendance
Boards/Banks/Small High		<ul><li>Bells Road, Gorleston</li></ul>	Flyer/poster
Street Businesses		<ul><li>Corner Shop, Bradwell</li></ul>	
		<ul><li>Leicester Road,</li></ul>	
		Gorleston	
		<ul><li>Magdalen Row,</li></ul>	
		Gorleston	
		<ul><li>Northgate Street, Gt</li></ul>	
		Yarmouth	
Large Shops	• Со-ор	■ Bradwell	Attendance
		<ul><li>Gorleston</li></ul>	Flyer/poster
	■ QD	<ul><li>Gorleston</li></ul>	,
Garages	<ul><li>Poster drops</li></ul>	<ul> <li>Leicester Road,</li> </ul>	Attendance
	·	Gorleston	Flyer/poster
		<ul><li>Northgate Street, Gt</li></ul>	
		Yarmouth	

Estate Agents	■ Poster drop and discussion	<ul> <li>Beccles/Burgh Road,         Gorleston</li> <li>High Street, Gorleston</li> <li>Northgate Street, Gt</li> <li>Yarmouth</li> <li>Gt Yarmouth</li> </ul>	Attendance Flyer/poster
Media/Press Releases	<ul> <li>Press (paper/online)</li> <li>Facebook</li> <li>Radio</li> </ul>	<ul> <li>EDP</li> <li>Comeunity, NFF, MESH</li> <li>BBC Norfolk News</li> <li>Archant Mercury         Newspaper</li> <li>Archant Advertiser         Newspaper</li> <li>Radio Norfolk</li> <li>Radio Broadland</li> <li>Radio Beach</li> <li>Radio Harbour</li> </ul>	Attendance Flyer/poster Email Telephone
Promotional Events	<ul><li>Gorleston Sixth Form College</li></ul>	•	Attendance Flyer/poster Email
Bulletins	<ul><li>Gorleston Community</li><li>Magazine</li></ul>		•