

# Grangemouth Flood Protection Scheme Newsletter

Issue 3: Summer 2022



To learn more about the scheme go to:  
[grangemouthfloodscheme.com](http://grangemouthfloodscheme.com)

Local pupils from Carronshore Primary sparkle with STEM

## Winners of STEM Education Programme Announced

The programme aims to inspire the next generation of original thinkers in science, technology, engineering and mathematics.

page 2—3

## GFPS Mobile Van Tour

We recently held a series of mobile van drop-ins for local people looking to find out more about the Grangemouth Flood Protection Scheme.

page 4

## Falkirk Science Festival: Innovate

Budding scientists were able to learn more about flooding from our experts and try their hand at designing their very own flood defence system.

page 5

# Carronshore Primary Ride the Waves to Take Top Spot in GFPS's STEM Education Programme

**The Flood Fixers from Carronshore Primary School** were awarded first place in the Grangemouth Flood Protection Scheme's inaugural STEM Education Programme.

The group really impressed the judges with their carefully considered flood design, which was presented in a clear and concise way and supported by very detailed diagrams.

The primary school programme aims to inspire the next generation of original thinkers in science, technology, engineering and mathematics.

**Carronshore Primary School teacher, Karen Mardon**, said: "We are absolutely delighted with the win. The children worked so hard and it was a brilliant learning experience for everyone involved. It was also a good project in terms of developing the skills needed for high school."

**The Flood Breakers from Bowhouse Primary** and **The Tsunamis from Moray Primary** were



The Flood Breakers from Bowhouse Primary

Highly Commended for their designs which really considered the community around the scheme, one of which even explored flood protection strategies in French.

**The Dancing Dinosaurs from the Grangemouth Sea Cadets** won the Community Group prize after impressing the judges with their breadth of knowledge and ability to answer technical questions on flood protection.

**Congratulating the winners, Alistair Dawson, Infrastructure Projects Manager at Falkirk Council**, said: "There were some really strong submissions in our very first STEM programme. I would like to say a very well done to all of the children and teachers for putting the hard work in."

"I was really impressed by just how much time the students had taken over their entries and the depth of research that they had cleverly translated into their models. To see their ambition, passion and enthusiasm is truly inspiring - congratulations to all those involved."



The Tsunamis from Moray Primary

Over 450 primary school children from 12 local schools took part in the STEM programme which was developed by consultants Jacobs in conjunction with Falkirk Council's education department.

The children had to find out more about flooding and its devastating effects, and then using what they had learned, participating teams were given the challenge of designing and showcasing their own flood protection solutions. Each group's entry was then made into a video and presented to a panel of industry experts.

**Jacobs' Principal Social Value Consultant Rachael Cassidy, who developed the STEM programme with colleagues**, said: "The GFPS STEM education programme aims to provide young people with a challenging and supportive environment to help inspire the problem solvers of the future."

"By using the basic building blocks of reading, writing and mathematics, participants were shown how they can apply these skills in real-life

situations and unleash the potential that exists within each and every one of them."

Following its success, it is hoped that the STEM Education Programme will be rolled out to both primary and secondary schools in 2023.



The Dancing Dinosaurs from The Grangemouth Sea Cadets



## New GFPS Walking Audio Trail Launched

The GFPS team has developed an audio trail on the **Falkirk Explored app** which you can listen to whilst you walk.

On the **Grangemouth Flood Protection Trail**, listen to a guided tour to discover more about historic flood events and the development of the flood protection scheme that will benefit Grangemouth.

**Alistair Dawson, Infrastructure Projects Manager at Falkirk Council**, said:

"This new, interactive walking audio trail offers a great opportunity to learn more about past and present flood risk. I hope that users find it interesting and informative."

Accessible to both Android and iOS users, the Falkirk Explored app is available to download now.

# Grangemouth Flood Protection Scheme Mobile Van Tour

In June, we held a series of mobile van drop-ins for people in the local area to find out more about the flood protection scheme.

Our project team was on hand to discuss the scheme in more detail and answer any questions or queries about its ongoing progress.

**Alistair Dawson, Infrastructure Projects Manager at Falkirk Council**, said: “We are keen to keep everyone regularly updated on the Grangemouth Flood Protection Scheme. I am delighted with how local people are already engaging with the project team and hope that will continue as the scheme progresses.”



The GFPS mobile van tour at Klondyke Garden Centre

## Helping Engineering Students Get to Grips with Flooding at the University of Strathclyde

Members of the GFPS team hosted a workshop at the University of Strathclyde for their Civil and Environmental Engineering students recently.

The students looked at the GFPS as a case study and used what they learned about the risks of ground investigation work to put their theory into practice!

**Michael Frew, Associate Director of Ground Engineering at Jacobs**, said: “The students looked at Grangemouth since it’s a very complex case, with multiple sources of flooding and both residential and industrial areas to be protected. It makes a fascinating case study for students to use theory they’ve acquired through their degree.”

# Falkirk Science Festival: Innovate Inspires Young Scientists in Grangemouth

At the recent Falkirk Science Festival: Innovate, budding scientists were able to learn more about flooding from our experts and try their hand at designing their very own flood defence system.

The events which took place at Zetland Park and Helix Park provided young people with the opportunity to explore all things STEM (Science, Technology, Engineering and Mathematics) and develop essential skills for the future.

As well as showcasing the winning designs from our STEM Education Programme, we were on hand to listen to feedback about the scheme and to answer any questions about how the flood defences will affect homes and businesses across the local area.

Those who stopped by were also invited to register to receive emails about the Scheme. If you’d still like to register your interest, head over to our website [www.grangemouthfloodscheme.com](http://www.grangemouthfloodscheme.com).



Jacobs' Kara Cannon and Abbie Bell inspire budding scientists

# Meet the GFPS Team

In each issue of the newsletter, we will introduce you to a new member of the GFPS team. It's the turn of team member Stuart Slaven, Jacobs Senior Engineer on the project.



Stuart Slaven

Stuart is one of the flooding experts at Jacobs working to deliver the Grangemouth Flood Protection Scheme. We asked Stuart some quickfire questions about the scheme:



## What is your role on the project?

I have quite a broad remit within the project ranging from providing technical input, supporting the project management and administration and also overseeing stakeholder meetings and discussions, the latter being my main area of focus at present.

The project is going through a key phase where we are reaching out to engage with as many residents and business owners who will be directly affected, either during construction or upon completion.

It is my role to have discussions with these key stakeholders either on the telephone or 'face to face'. This enables me to share the latest information on the project, and how it may impact them. It is also an opportunity to answer any questions, and hopefully, allay any concerns they may have.



## What do you like most about working in flooding?

I have been fortunate to have worked on major flood protection schemes from conception to completion. This has allowed me to have an input at all stages of the project lifecycle, from investigating the source and scale of the problem, identifying the potential solution and then to the design and delivery of that solution.

I have also witnessed some of the finished schemes in action, working as planned, protecting numerous homes and businesses from the devastating impacts that flooding would have brought if it wasn't for the defences I had a key part in delivering.

Working on large scale flood schemes has also allowed me to gain an understanding of the broad range of specialisms within civil engineering which are required to develop these projects, this in turn, keeps work-life varied and interesting!



## Why are there different types of flood defences throughout the scheme?

As the scheme is covering such a wide area, we are using different types of flood defences because different locations have their own environmental issues, ground conditions and available space among other things that we need to consider.

How the defences will look when they are completed will vary from exposed steel piles in industrial areas, to patterned or even coloured concrete walls. In some areas, the defences will have brick or stone cladding. The scheme will also use embankments as flood defences, these can be covered in grass or wildflowers. The choice of defence type and finish will reflect the local environment in which it is located.



## What is the top priority for the flood protection scheme?

There are a whole range of important priorities which need to be considered when developing a flood protection scheme.

To single just one out is difficult but a finished scheme needs to avoid a certain level of flood water getting into properties and businesses or from disrupting key infrastructure like roads or railways.

In trying to achieve this aim, we must strive to deliver a solution which minimises impacts on, or where possible, enhances the visual and natural environment of the local area and is least disruptive to the locals during construction.



## How are you protecting local wildlife and the environment?

The environment and any impact the scheme has on it is a key consideration when developing a flood protection scheme. The team has already identified the presence of wildlife and important vegetation and habitats. We also look to avoid impacting the environment, but where this isn't possible the team will use mitigations such as restricting certain works or constructing replacement/enhanced habitats.



## How will you reduce flooding during construction?

During the design phase of the project, we will identify the potential risk of flooding during construction. To reduce any potential risks, we can use temporary flood defences, construct the defences in a certain order, or reduce the need to work in the river channel.



## Got a Question? Speak Directly to our Project Team

Would you like more information about how the proposed flood defences might impact your home or business? The GFPS team has been offering one-to-one sessions with directly affected residents and businesses.

Tenants and owners of properties that will be affected by the scheme can take part in a one-to-one session which can either be a face-to-face meeting or a telephone or online consultation.

**Nicole Anderson, Flooding and Communications Graduate** from Falkirk Council, who is meeting with locals, said:

"It's great to go out and speak to the people who will be directly affected by the flood defences and understand their views on the project. We're gaining some really interesting feedback that we take on board and discuss with the full project team."

If your property is being impacted by the flood defences, and you're interested in arranging a telephone consultation or face-to-face meeting with the team, please email us at [grangemouthfps@falkirk.gov.uk](mailto:grangemouthfps@falkirk.gov.uk).

# Protecting communities in Grangemouth, Wholeflats, Glensburgh, Langlees, Carron and Carronshore



**2,650**  
properties



**5,800**  
people



**330**  
non-residential  
properties



**6km**  
roads

## Extra News from Falkirk Council

### Grangemouth Community Action Plan

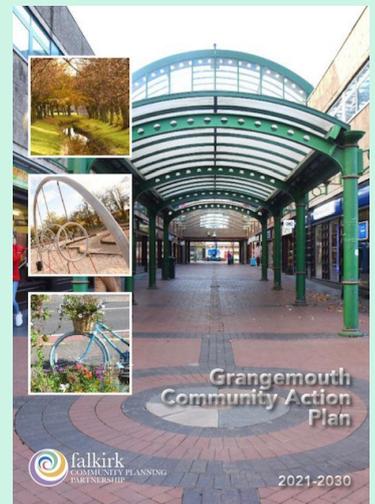


A new Community Action Plan (CAP) has been produced for Grangemouth, outlining the challenges and opportunities in Grangemouth, and how these be tackled over the next ten years.

The Plan originated in 2018-19 when consultation work was undertaken with the local community. A draft CAP was produced in 2019 but it was put on pause, as Grangemouth (and the wider community) responded to the COVID-19 pandemic.

That Plan has now been thoroughly updated by the Grangemouth Stakeholder Group – a group of service providers and community representatives from across the area.

You can download the Plan at [www.falkirk.gov.uk/grangemouthcap](http://www.falkirk.gov.uk/grangemouthcap).



### How can you get involved?

The Community Action Plan will be implemented by the following groups working in close cooperation:

- The Community Planning Partnership
- Local community groups
- The local third sector
- Members of the local community

For further information, please contact: [communityplanning@falkirk.gov.uk](mailto:communityplanning@falkirk.gov.uk).

If you or someone you know would like a copy of this newsletter in another language or format this can be arranged by contacting our customer services centre on 01324 506070.

You can keep up to date with the scheme by visiting our website:

[grangemouthfloodscheme.com](http://grangemouthfloodscheme.com)



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