

# Grangemouth Flood Protection Scheme Newsletter

Issue 4: Winter 2023



**GRANGEMOUTH**  
Flood Protection Scheme  
Protecting the heart of our communities



The GFPS team has unveiled new information notice boards.

## 2023 STEM Education Programme

After its successful launch last year, the programme will be rolled out to local primary schools, youth groups and secondary schools.

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## Safeguarding Against Floods

Read our top tips on how to become flood-proofed.

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## Meet the GFPS Team

In this newsletter, we introduce you to Falkirk Council's Nicole Anderson who is working to deliver the Grangemouth Flood Protection Scheme.

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# Look Out for Our New Information Notice Boards

The **GFPS team** has unveiled new information notice boards at key locations across the scheme area.

The notice boards provide an overview of the overall scheme, with a schematic map of the proposed flood defence locations, and further information on each area.

## Across the scheme

The new boards are located across Zetland Park, by Dorrator Bridge on Stirling Road, by Chapel Burn on Carronshore Road, near the Children's Playground in Rannoch Park, opposite Park Road

on Stenhouse Road and by Millhall Gardens on Wholeflats Road/Smiddy Brae.

**Alistair Dawson, Infrastructure Projects Manager at Falkirk Council**, said: "We are pleased to unveil our new Grangemouth Flood Protection Scheme information notice boards at key locations across the scheme so that communities can get up-to-date information that's presented in a clear and visual way."



**Have you checked out our new information notice boards yet?**



One of the GFPS notice boards located across the scheme.

# New STEM Education Programme Launched

We are excited to announce that we will once again be running our **STEM Education Programme**, which aims to inspire the next generation of original thinkers in science, technology, engineering and mathematics. After its successful launch last year, the programme will be rolled out to primary schools, local youth groups and now secondary schools in 2023.

The 2022 programme provided local children the chance to learn more about the scheme, why flood defences are important, how they're built and the opportunity to explore future careers in the flooding industry.

Those that took part received free learning resources and got to design their very own flood defence model. The winning designs were showcased last year at the Zetland Park Festival and the successful teams received shopping vouchers to buy what their school, class or group needed.



Last year's runners up 'The Tsunamis' used their £50 Amazon voucher prize to buy a new home for Max, a rescued goldfish.

If you're a primary or secondary school teacher or involved in running a local youth group and would be interested in getting involved in our 2023 STEM Education Programme, please email us on: [grangemouthfps@falkirk.gov.uk](mailto:grangemouthfps@falkirk.gov.uk).



Last year's STEM Education Programme winners. Falkirk Council's Alistair Dawson with Lucy Wilcock, Finlay Campbell, Corey Russell, Darcy Kemp, Teacher Karen Mardon, and Erin Miller from Carronshore Primary School.

# How to Become Flood-Proofed



Flood warnings let you know of suspected extreme weather in your local area that could lead to a flood. These alarms should be taken seriously and it's important to have a plan to minimise flood damage to your property and, potentially, save you life!

**Alan McGowan, Design and Consents Manager at Jacobs**, says "It's really important that if you're at risk of flooding then you know what to do if flooding hits. Thinking ahead and preparing can make a real difference to how you and your family can stay safe and deal with unexpected events."

Here are our top tips:

- 1.** Sepa's Floodline can warn you of a potential flood. Head over to [www.floodlinescotland.org.uk](http://www.floodlinescotland.org.uk) to sign-up for mobile phone alerts.
- 2.** Check to see if your insurance policy covers flooding damage. If you're struggling to find insurance with flooding cover, contact Flood Re at: [www.floodre.co.uk](http://www.floodre.co.uk) who help property owners find affordable home insurance and flood cover.
- 3.** Ensure you know how to turn off your gas, electricity and water mains supplies in your property.
- 4.** Think about what you would want to move to safety during a flood. This includes pets, furniture, electrical equipment and personal belongings.
- 5.** Consider installing preventative measures to protect your property.
- 6.** Prepare an emergency kit and remember to store this in a place that isn't prone to flooding. To read what should go into your emergency kit, head over to [www.falkirk.gov.uk](http://www.falkirk.gov.uk).
- 7.** Keep important documents in waterproof bags.
- 8.** Take note of important telephone numbers such as your doctor and arrange alternative ways of contacting close relatives.

# STEM in the Park

**The grand re-opening of Grangemouth's Zetland Park** provided a fantastic opportunity for the GFPS team to engage with the local community in late Summer.

The celebratory event on Sunday, 28th August marked the completion of the £2.5m regeneration of the park, funded by Falkirk Council, the National Lottery Heritage Fund, and other partners.

The event provided the GFPS team a chance to talk about its STEM Education Programme and give local children an opportunity to explore all things STEM (Science, Technology, Engineering and Mathematics) and develop essential skills for the future.

Young people were able to learn more about flooding from our STEM experts and try their hand at designing a flood defence system.

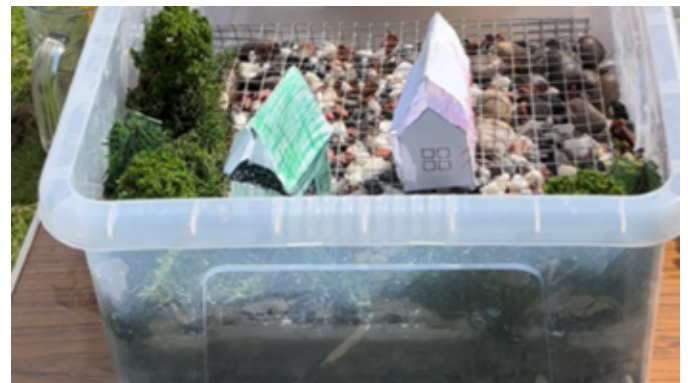
**Rachael Cassidy, Principal Social Value Consultant (Education) at Jacobs**, said: "It was great to be back at Zetland Park and help local children see how they could develop their own flood defences based on what the scheme is doing locally. Our working model for the children to try was a big hit and we had around 100 visitors to our stand."

The team was also on hand to listen to feedback about the scheme and answer any questions about how the flood defences could impact residents and businesses across the local area.

After a decade of planning and hard work, it was only fitting that the re-opening of Zetland Park involved the whole community, with around 7,000 people in attendance. The historic Zetland Park has since been included in the Fields in Trust list of favourite Scottish parks.



Jacobs' Rachael Cassidy testing out the flood defence model.



Harris and Emily designing their very own flood defence system.

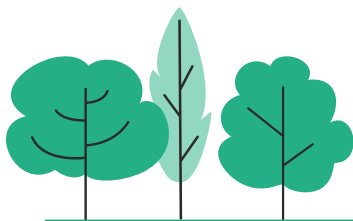
# Carrying Out Ecological Surveys to Protect Our Natural Wildlife



Understanding wildlife is a very important part of the work the GFPS team does to help protect species in the local area.

Ecologists have been studying great crested newts, a UK endangered species, as part of our extensive ecological survey programmes around the Grangemouth Flood Protection Scheme area.

We have also carried out hedgehog and bat surveys this year and will be surveying a range of birds over the winter months.



**Rosanna Mooney, Principal Ecologist at Jacobs**, said: “Carrying out ecological surveys is an important stage in the design of the scheme to ensure that natural wildlife is protected. Our team has been up early and out late to conduct these surveys to ensure that local wildlife species are not disturbed too much when work starts on the scheme.”

Keep an eye on our website and social media channels for further information on the surveys we carry out. While we understand that there is a lot of interest in the results of our surveys, we cannot make this information publicly available as it contains sensitive location information on protected species.

## Reducing the GFPS’s Impact on Trees

**As the largest flood defence project in Scotland** and one of the biggest in the UK, the GFPS has been identified as the highest national priority, given the potentially significant impacts for the community if an extreme flood event were to occur.

On completion, the proposed scheme will benefit 5,800 people, 2,650 homes, 330 businesses and road and rail infrastructure, by just over 28km of flood defence walls, embankments, the installation of flood gates, flow regulation measures and drainage work.

**Alan McGowan, Jacobs Design and Consents Manager for the scheme**, said: “Delivering this ambitious scheme requires the need for tree felling. While we understand there are concerns around this, any decisions to cut down trees will never be taken lightly, though sometimes it is the only option. We have been able to reduce the numbers of trees to be felled, particularly within Zetland Park, and will be sharing this information at our next community engagement events.”

“Where practical, all flood defences have been designed to retain as many trees as possible but, in some areas, the defences have to be located within the root zone of existing trees as there is no alternative place to position the flood defences.”

“We are committed, however, to planting on average three trees across the scheme for every tree removed, as well as undertaking a programme of enhanced landscaping measures tailored to each location affected by tree removal.”

“The proposed planting plan will ensure that the tree stock is more resilient for future decades, by planting species suitable for their environment and avoiding planting single species that are particularly vulnerable, should any individual tree become diseased.”

“This will ultimately improve the tree species and biodiversity mix across the scheme, creating an improved habitat for future generations to enjoy.”

# Meet the GFPS Team



Falkirk Council's  
**Nicole Anderson**

In each issue of the newsletter, we are introducing you to a member of the GFPS team. This time it is the turn of team member **Nicole Anderson**. As **Falkirk Council's** Flooding and Communication Graduate, Nicole is working to deliver the Grangemouth Flood Protection Scheme. We asked Nicole some quickfire questions about the scheme.



## What is your role on the project?

I'm a Flooding and Communication Graduate at Falkirk Council. As part of my role on the GFPS team, I directly engage with the community to help spread awareness of the project; attending community engagement events, hosting community group presentations and carrying out face-to-face discussions.



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

Protecting local wildlife is very important to the whole GFPS team. As part of our extensive ecological survey programmes, we are studying local wildlife around the Grangemouth Flood Protection Scheme area to understand their movements and ensure that there is as little disruption as possible when the scheme construction starts.



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

This is the biggest flooding project I have been involved in, having previously worked on general day-to-day flooding issues.

We have all seen the devastating effects that climate change has had around the world with large flooding events. Although we've not seen these extreme events in Falkirk, it is at high risk, so it is exciting to be part of a project team actively working to prevent this type of catastrophe. I love helping to protect vulnerable areas from flooding.



## What are your top tips in dealing with flooding?

Stay abreast of flood warnings or alerts, especially during periods of heavy rainfall, by signing up to receive SEPA Floodline alerts. Prepare a flood emergency kit in advance of any flood alerts.

### This can include:

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- ✓ Important documents, such as insurance policies
- ✓ Prescription medication/repeat prescription forms
- ✓ Extra cash
- ✓ Torch, spare batteries, phone-charger
- ✓ Food (non-perishable)
- ✓ Essential toiletries, wet wipes
- ✓ Emergency numbers (including family members)
- ✓ Bottled water (check use-by date)
- ✓ Some entertainment (card games/radio)
- ✓ Waterproof clothing and a pair of wellies would be useful too!



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

Protecting local residents, businesses and industries is of paramount importance for us, we want to prevent the flooding concerns by creating a protection scheme. The GFPS team's top priority is to future-proof the town from flooding events.

# Prepare for Flooding

Unfortunately, flooding cannot always be entirely prevented but being prepared and understanding the flood risk in your area can minimise the impact on your property.

If you have signed up to receive Alerts or Warnings from SEPA's Floodline, you will have advance notice and know when and where flooding is likely. Pay attention to the flood warnings or flood alerts and follow advice given.



## How do I prepare for a flood?

- Check your flood risk.
- Flooding can affect more than just your property; it may impact on your community or your route to work. Use the Scottish Environment Protection Agency (SEPA Flood Maps) to find out if you're in an area at risk of flooding caused by rivers, the sea or surface water.
- Get home insurance.
- Sign-up for flood alerts and warnings.
- Prepare an emergency kit.
- Make a flood plan/join a community flood group.
- Consider extra steps if you are older or disabled for example e.g. ask to be put on the priority services register for water and energy supplies.
- Consider installing flood defences in your home, such as sewage non-return valves, door and gate barriers, waterproof plasterboard.
- Flooding is upsetting and can be difficult, but there are steps you can take if it happens.



## When flooding is forecast you should:

- 1 Check Floodline. If you've received a message from Floodline, visit [flood.sepa.org.uk](https://flood.sepa.org.uk) for the full update.
- 2 Keep your mobile phone charged. Follow your flood plan.
- 3 Find warm clothes and wellies.
- 4 If power fails, unplug appliances to prevent electric shock when power returns.
- 5 Shut off gas, electricity and water supplies and activate any flood defences you may have.
- 6 Check on vulnerable and elderly neighbours.
- 7 Move pets and animals to a safe place and ensure they have enough food and water.
- 8 Move sentimental and valuable smaller portable items onto higher levels if time.
- 9 Prepare to evacuate if necessary.
- 10 Gather emergency supplies/contact numbers and continue to follow local updates/advice.





# Floodline

Scottish Environment Protection Agency

**0345 988 1188**

**[floodlinescotland.org.uk](http://floodlinescotland.org.uk)**



## During a flood

- Do not walk, drive, or swim through flood water. Cars and people may be swept away.
- Avoid direct contact with flood water. Practise safe hygiene and wash hands with soap and water to prevent germs.
- Listen for information from your local officials on how to safely use water to drink, cook or clean.
- Move to higher ground, inform someone of your location, and wait for emergency services to find you.
- Co-operate with emergency services and your local authority who are responsible for co-ordinating relief measures.



## After a flood

- Contact your insurance company.
- If safe, take photographs of the damage caused to your home and valuables. If you need recovery support or advice, contact the Scottish Flood Forum.
- Be aware of the health effects caused by a flood.
- Wear appropriate clothing and protection, flood water can be contaminated.
- Be mindful of how the stress and traumatic feelings of loss can have an impact on a person's mental wellbeing.
- If repairs are needed, consider flood resilient improvements.

# Keeping an “Ear to the Ground”

Ground investigations are an essential part of the design process for any flood defence structure. This information will enable designers to develop solutions for the flood defences and associated infrastructure, taking into account the below ground soils and ground water.

Ground investigations will also provide information on the nature and extent of any contaminated land which could be disturbed, as well as confirming the location of utilities and potential utility diversions.

In civil engineering and building works, unexpected ground conditions can result in projects running

over budget and behind schedule. It is vital to know about the conditions before construction begins.

**Richard Allan, Principal Engineering Geologist at Jacobs**, said: “As part of preparations for the Grangemouth Flood Protection Scheme, we are investigating ground conditions across the various scheme locations.

“The detailed information we get from this ground investigation work will help us to design and build the flood defences in the safest and most efficient way possible.”

## What is a ground investigation ?

Ground investigation is the examination and assessment of the land, soil, rocks, and groundwater below the surface. Through these investigations, we can identify ground hazards and establish the suitability and feasibility of a project by highlighting any areas of risk and additional cost.

There are various methods, including trial pits, trenches, boreholes, and drilling which can be used to obtain ground samples before testing. The type used is dependent on the proposed development, site location, anticipated geology, and any local authority requirements.

Laboratory tests are carried out on many of the samples taken to supplement the information gathered. This helps us to determine the properties of the soils and rocks, in particular, the strength and the nature of the groundwater, before the design and any construction begins.

## How's it done ?

## What are they used for ?

Information obtained from ground investigation provides data which can be used in the design and engineering and ensures that the main works can be done safely, economically, and efficiently. Information obtained will also reduce any risk of encountering unexpected ground conditions during construction.



# Did you Know?

A Flood Relief Channel (FRC) can help take the pressure off a river's main channel following heavy rainfall.

FRCs are artificial channels that are created to divert water around or from important locations if a river is at risk of flooding.

They decrease the risk of flooding by reducing the amount of water in the main channel.

Grangemouth's FRC was built in the 1960s to reduce the chances of river flooding to properties along the Grange Burn, which regularly occurred prior to its construction.

The 2km long FRC conveys flow from the Westquarter and Polmont Burn and commences just to the north of the M9 motorway and A905 Beancross Road at Rannoch Park and discharges into the River Avon immediately upstream of the A905 Wholeflats Road bridge.

On its own, this FRC is not enough to avoid flooding in Grangemouth, but it is an integral part of the GFPS and will be further improved to pass more water into the River Avon. The FRC won't reduce the chances of tidal flooding which is the main risk on the Grange Burn north of Zetland Park.



Grangemouth's Flood Relief Channel.

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



**2,650**  
residential  
properties



**6km**  
roads



**330**  
non-residential  
properties



**5,800**  
people

## Extra News from Falkirk Council

### Celebrating 150 years of Grangemouth

In 1872, Grangemouth became a burgh and was passed from the ownership and control of the Dundas family into the hands of elected representatives of the people of the town. This marked the coming of age of Grangemouth and paved the way for the massive developments in the years since. To celebrate the 150th anniversary of Grangemouth becoming a burgh, plans are afoot to hold a series of monthly events at Grangemouth Library over the coming year including talks, exhibitions and walks.

For more information, please contact [civic.events@falkirk.gov.uk](mailto:civic.events@falkirk.gov.uk)

Date	Time	Topic	Host
<b>February 23</b>	<b>2pm - 4pm</b>	Grangemouth, Old Town and New	<b>Maureen Burns</b>
<b>March 30</b>	<b>2pm - 4pm</b>	Architecture of the New Town	<b>Geoff Bailey</b>
<b>April 27</b>	<b>7pm - 9pm</b>	The Chemical Age	<b>John Blackie</b>
<b>May 25</b>	<b>7pm - 9pm</b>	WW2 and the story of The Drome	<b>Geoff Bailey</b>
<b>June 29</b>	<b>7pm - 9pm</b>	The Zetland Park Regeneration Project	<b>Jessica Paterson</b>
<b>July 27</b>	<b>7pm - 9pm</b>	Grangemouth & its Shipping History	<b>Tom Robertson</b>

*Refreshments will be provided*

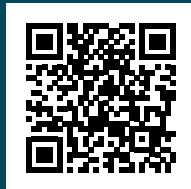
If you or someone you know would like a copy of this newsletter in another language or format this can be arranged by contacting our customer services centre on 01324 506070.

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

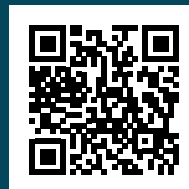
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