

## Perth & Kinross Council – Environment & Infrastructure

### Blairgowrie & Rattray Surface Water Management Plan

#### Community Drop-In Sessions: Summary of Questions & Answers

##### Introduction

Perth & Kinross Council recently carried out a Surface Water Management Plan (SWMP) for the town of Blairgowrie & Rattray. In February and March 2024, the Council engaged with the local community on:

- the risk of flooding in the Blairgowrie & Rattray area;
- the findings from the Surface Water Management Plan; and
- other actions to raise awareness and improve community resilience.

A newsletter summarising the study outputs was distributed to the local community on 21 February 2024 and was also made available on the Council's consultation hub (at <https://consult.pkc.gov.uk/communities/blairgowrieswmpevent>) from 23 February to 22 March 2024. This allowed residents to view the draft outputs from the SWMP. Residents were encouraged to complete the online form provided to record their comments and views.

Two community drop-in sessions (see Figure 1) were held at Blairgowrie Town Hall on the following dates:

- Wednesday 28 February; and
- Thursday 7 March.

This supplemented the information already made available to residents through access to the draft SWMP reports. This also offered residents the opportunity to speak directly with Council officers, RSK/Binnies (design consultants), SEPA, Scottish Water and the Scottish Flood Forum.

The Council would like to thank those that took the time to provide comments and attend a drop-in session.

This report collates the comments received and provides the Council's response to those questions.



Figure 1 – Community drop-in session held in Blairgowrie Town Hall

## Community Response

A total of 51 people attended the community drop-in sessions and 34 submitted comment forms during the consultation period. In general, the impression received from the community was positive and a number of different concerns were raised.

A summary of the general feedback received was as follows:

- Residents were supportive of efforts to reduce flood risk throughout the town and were keen to see some of the proposed ideas implemented as soon as practicable.
- Concerns were raised over the history of construction throughout the town, particularly at locations where culverts had been installed beneath private dwellings (Ratray Burn) – although it was acknowledged that this is a historical issue and that current planning policy no longer permits such action.
- There was widespread support for the use of Natural Flood Management (NFM) techniques in the upper catchment of the Ratray Burn (e.g Option B - refer to newsletter), particularly if this could be quickly implemented and even if its ability to reduce flood risk was relatively low.
- There was concern that any additional flows into Cuttle Burn Den in Blairgowrie (e.g. Options A & E - refer to newsletter) could increase the frequency of floodwaters overtopping a culvert located near its confluence with the River Erich, affecting local access track/footpath.
- There was mixed support for placing a SuDS facility in Ratray Common (e.g. Option D – refer to newsletter) – some had concerns about the safety of an open water body near to a primary school, some were worried about how the final park may look, and some people had concerns that the cost of such a project could be prohibitive causing a delay to any flood mitigation measures being implemented elsewhere.
- There was concern about transport links outside the town during major flood events, although it was acknowledged that this was out with the scope of the SWMP.
- There were comments that during periods of extreme rainfall surface water runoff from nearby agricultural land deposited significant volumes of mud and silt on Upper Allan Street. The mud and silt quickly blocked gullies causing surface water to bypass the drainage system and flow into the town.

Appendix A (below) provides a summary of the main questions received along with the Council's response. Those submitting forms have not been named for confidentiality reasons. This report will be published on the Council's Consultation Hub (at <https://consult.pkc.gov.uk/communities/blairgowrieswmpevent>) and distributed to local Councillors, the Community Council and members of the community that registered attendance at a drop-in session or provided a consultation response.

## Next Steps

The Council will now update and finalise the Blairgowrie & Ratray SWMP and report the conclusions to the next available Climate Change and Sustainability Committee. Thereafter, the Council will implement the recommendations of the reports (subject to funding and any statutory approvals). The Council will carry out further consultation with the community as proposals are further developed.

If you require any further information on the Blairgowrie & Ratray SWMP, please contact:

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Email: Flood@pkc.gov.uk

## Appendix A – Questions and Answers

### Roads

#### **Q1. Are there any plans to resolve flooding on travel routes to/from the town, some roads have been closed on multiple occasions recently and in some cases, closures have been for several days.**

The scope of the SWMP was limited to the main urban areas of Blairgowrie and Rattray and did not extend to the surrounding rural road network.

The Council's Roads Maintenance Partnership (RMP) were, at the time of writing, carrying out a feasibility cost analysis into potential flood mitigation options for the worst affected travel routes, including on the A923 and the B954. Any economically viable proposals would be subject to prioritisation against other Capital projects.

With regard to the A93 at Cargill, some works have been programmed within the road boundary to help alleviate flooding at this location. However, to raise the road and provide suitable drainage to cope with the levels and intensity of rainfall experienced recently would be significant. If the current mitigation work does not alleviate flooding to manageable levels, any further mitigation options would require to be put forward for inclusion in future years Capital Programme.

RMP have not been able to move forward on any of these proposals as they have been utilising a risk based approach and initial focus has been on other flood sites throughout the area.

#### **Q2. Why can the road gullies (drains) not be cleaned up more quickly? Can Scottish Water and the Council work more closely together on this?**

Blairgowrie and Rattray is predominately served by a combined sewer system. This means that all foul water (from sinks, showers, toilets etc) and surface water (from roofs, roads and footpaths) are collected in one pipe and routed to the Waste Water Treatment Works. The combined sewer system is an asset of Scottish Water and they are responsible for maintenance. A combined sewer system provides no attenuation of surface water.

In areas where development is more modern a separate foul and surface water drainage system exists. The foul only sewer collects all foul water and routes it into Scottish Water's combined sewer. The surface water drainage system collects and directs all surface water runoff to a storage area (usually a SuDS pond or underground storage tanks) where it is attenuated and discharged (at a controlled rate) into a local watercourse, the ground, combined sewer, or other drainage system. The responsibility of a surface water system can be complex and general varies between Scottish Water and the local Council, although on more rarer occasions a private factor has the responsibility for maintenance.

Local public road drains (and connecting pipework to the main surface water sewer) are the responsibility of the Council. Road drains are typically cleaned every 2 years, and residents are encouraged to report any blocked road drains by contacting the Council on the contact details provided below.

Transport Scotland are responsible for drainage of the trunk road network.

*See links below for more information:*

Scottish Water - <https://www.scottishwater.co.uk/In-Your-Area/Flooding-Information/Flooding-and-Scottish-Waters-Responsibilities>

Transport Scotland - <https://www.transport.gov.scot/media/53278/scottish-trunk-road-network-2023.pdf>

Perth & Kinross Council - [Report drains and spillage issues - Perth & Kinross Council \(pkc.gov.uk\)](https://www.pkc.gov.uk/report-drains-and-spillage-issues)

#### **Q3. How can the volume of debris flowing over Upper Allan Street during extreme events be handled?**

Option A proposes the installation of a surface water diversion (road table) on Upper Allan Street to direct overland flow into Cuttle Burn Den before it can cross the bridge and continue downslope into the town centre.

It is likely that silt and mud transported during extreme rainfall events originates from local agricultural land (e.g. fields that have recently been cultivated ready for planting and as a result the soil is loose and easily transported during heavy rainfall). The Council have engaged with landowners to raise awareness of surface water runoff, including silt and other debris, from agricultural land. The management of silt transportation will also be considered during detailed design.

## **Land Ownership**

### **Q4. Can purchasers of properties in the area be assured that they are safe to proceed after the completion of this SWMP?**

The Council has no remit or responsibility to advise potential property owners of the risk of flooding to any one property. It would be the responsibility of any prospective property owner to undertake due diligence, take expert advice and act accordingly.

Flooding is a natural phenomenon that can never be entirely prevented. However, action can be taken to reduce the risk of flooding and its impact.

The Council has no statutory duty to prevent properties from flooding but will help residents and communities as much as we can. The primary responsibility for avoiding or managing flood risk lies with land and property owners, but certain public bodies are expected to take a proactive role in managing and, where achievable, lowering overall flood risk.

SEPA has published flood risk maps on its website at <https://map.sepa.org.uk/floodmaps>. These maps indicate the risk of potential fluvial (river) and pluvial (surface water) flooding to parts of Blairgowrie & Rattray. The flood maps are largely backed up by historic reports of flooding, however, these are indicative and do not cover every instance of past flooding which has been reported.

In December 2021, SEPA published the Tay Flood Risk Management (FRM) Plan and in December 2022, the Council published the Tay Local FRM Plan. Both documents can be viewed via <https://www.pkc.gov.uk/frmplans> and include the requirement for a surface Water Management Plan (SWMP) for Blairgowrie & Rattray as one of the selected actions for managing flood risk in the area.

The SWMP has been carried out to enable decision-making by the Council on options to reduce flood risk over a wide area. The SWMP uses data which are the best available at the time of the study and are proportionate to the scale of the assessment. This follows Scottish Government SWMP guidance for this purpose only, and the outcomes of the study cannot be relied upon for any other purpose.

The SWMP is unable to advise whether any individual property is safe from flood risk due to there being highly localised factors involved at property-level that this study may not have considered. The Council's Flooding Team can be contacted and will provide any relevant information that it holds in relation to flood risk at or near the property.

### **Q5. Can the homeowners who are riparian owners of the Rattray Burn take responsibility for the culvert at Parkhill Road?**

Riparian landowners have a responsibility to maintain the bed and banks of any watercourse as it passes through their property. This includes preventing any material entering the watercourse that could become an obstruction to the flow of water and/or cause a flood risk elsewhere. It is also the responsibility of the riparian owner to remove any such debris from their section of the watercourse even if it has been transported downstream from another property.

The responsibility for improving or increasing the capacity of a watercourse also lies with the riparian landowner, but there is no requirement to do this. A SEPA licence is likely to be required for any changes to the watercourse or culvert before works can commence.

The above paragraphs also apply to culverted sections of watercourses; the landowner through which a section of culverted watercourse travels, is responsible for that section of culvert whether or not it starts / finishes within their land.

Under the Flood Risk Management (Scotland) Act, the Council carries out routine inspections of relevant bodies of water and the condition of each relevant body of water is assessed with respect to flood risk. If it is found that the condition of a relevant body of water gives rise to a risk of flooding, and clearance and repair works would **substantially** reduce that risk, then a schedule of those works will be prepared, and the Council will carry them out. Any identified works are carried out in order of priority and as budgets allow.

## **Development**

### **Q6. Why were the development proposals at Schoolfield Road (and surrounding area) accepted by PKC?**

The proposals for the development (now known at Schoolfield Road) were first submitted in 2007 (reference 07/02012/OUT) and were refused by Perth & Kinross Council for reasons relating to a lack of wastewater facilities and existing land use. Information about the extent of the flooding was limited at that time and the consideration of flood risk in the planning process was at an early stage in its development. SEPA's indicative flood maps were first made available in 2006, but as the Rattray Burn catchment was too small, no information was provided on the flood extents of the burn. Some local knowledge and records of flooding were available, but this was likely to have been very basic in nature and lacking in the required detail (in relation to overland flood routes, or depths and volumes of flood water). The Council's Flooding Team was not established (in its current form) and was not consulted on the application at the time. However, the Council's Roads Maintenance Team did provide some limited historical flood information about water ponding on the site adjacent to High Street for consideration in the determination of the planning application. The developer subsequently appealed the decision to refuse the application and it was overturned by the Scottish Government's Reporter. The appeal decision also considered flooding and concluded that "there was no compelling evidence to suggest that the relevant bodies, which were not of a view that the proposed development would inevitably suffer or contribute to flooding problems, were unjustifiably complacent". This information, and any information provided by the public, was presumably also considered by the Scottish Government Reporter in the determination of the appeal decision at the time.

The development of the Glenalmond Road site was granted planning permission under the condition that it did not affect the existing flow of water from the Rattray Burn and that the development provided some additional flood storage. This flood storage was provided in the form of an infiltration basin at the eastern corner of the site. While this basin could never hold all of the flood water from the Rattray Burn, it does hold a limited amount of water, reducing flood risk further downstream to an extent. The surface water runoff generated from the development itself is managed within the site via soakaways and any runoff from the north is captured by a swale. The impact of the site on flood risk is therefore neutral or indeed slightly positive in terms of the attenuation offered by the infiltration basin. A small number of properties on David Grimond Place have been on the verge of flooding and they are advised to contact Springfield Properties (the owners of the site) who were investigating options to mitigate this by making improvements to ground levels at the east end of the street.

The current approach to managing flood risk in relation to new development is set out in the National Planning Framework 4 (NPF4), which notes that Planning Authorities should have regard to the probability of flooding from all sources and not increase flood risk elsewhere.

### **Q7. Why are the ponds at the Schoolfield Road (and surrounding area) development only designed for infiltration?**

Sustainable Drainage Systems (SuDS) aim to mimic natural hydrological processes by managing and controlling surface water runoff within the development in a more sustainable way. Where ground conditions allow the preferred method of disposal of surface water is through infiltration rather than discharge to other features such as a local foul sewer, surface water sewer, or local watercourse. Infiltration helps to contribute to the recharge of aquifers and to interflows through the upper soils that support baseflows in local rivers and streams.

**Q8. We are concerned about a new development where proposals are currently being submitted to the Council on land which is known to flood, how will this be handled by the Council?**

Any new development must comply National Planning Framework 4 (NPF4) and consider flooding from all sources, and not increase flood risk elsewhere or introduce additional users to risk on the site itself. Where a proposed development falls within or adjacent to the medium to high flood risk area as identified on SEPA's indicative flood maps, or where flooding has been identified as a potential issue, a Flood Risk Assessment (FRA) will be required. The FRA must show that the proposed development is not at risk of flooding, that surface water can be managed sustainably, and the development will not increase flood risk elsewhere e.g. neighbouring properties.

It is not uncommon for areas of land to flood under certain circumstances, it should be highlighted that there are now ways that this can be handled as part of proposed development. For example, a developer can propose Sustainable Drainage Systems (SuDS) as part of their development which will be able to mitigate flood risk at the site and provide an amenity value (i.e. wetland or pond). This type of feature is required within modern developments, as they help to reduce overall flood risk, improve local biodiversity, and create healthy living spaces. The presence of flooding at a low point on an existing parcel of undeveloped land does not necessarily equate to a later development on the same site being at risk of flooding, or increasing flood risk to adjacent properties.

## Options

**Q9. Has the study considered the Rattray Burn culvert, beneath Parkhill Road, in detail?**

In simple terms, yes, the study has considered the Rattray Burn culvert.

The study developed an integrated catchment hydraulic model to represent the sewer network and watercourses throughout Blairgowrie and Rattray. This is a computational model utilising industry standard software, based on the best available data at the time of the study. The Rattray Burn is represented within this model, including the culvert, based on Lidar, topographical survey, and CCTV survey data. The model was calibrated using historical flood data and is considered to provide a good representation of flood risk for the purposes of this study.

**Q10. Can the Rattray Burn culvert beneath Parkhill Road be improved/replaced/upsized to ease the bottleneck at this location?**

Two options were tested as part of the study by either increasing the size of the culvert, or by stopping up the culvert and redirecting the burn around properties in an open channel.

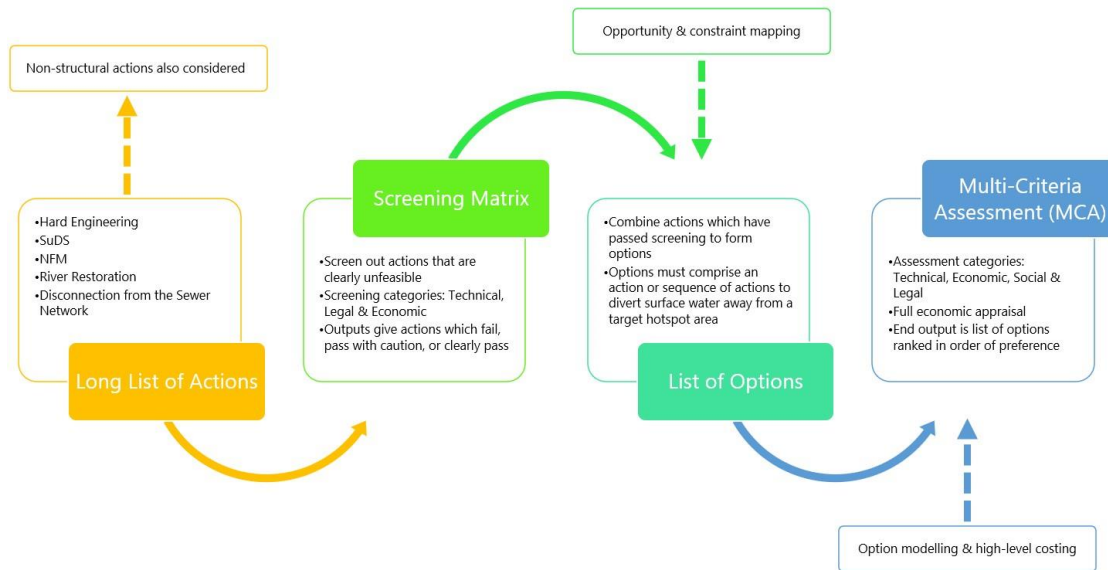
The options did provide some reduction in flood risk at Schoolfield Road, however, there were two issues raised:

1. It increased flood risk downstream at Kirkton Park where another (smaller) culvert exists.
2. The flood model predicts floodwaters overtop the Rattray Burn upstream of the proposed culvert limiting the level of flood protection afforded by this option to Schoolfield Road and the surrounding area.

Under the Flood Risk Management (Scotland) Act 2009, these options were therefore deemed unsuitable for taking forward.

**Q11. Why were only five proposals offered at the drop-in meeting?**

The drop-in meeting presented the top 5 ranked preferred options of the study. The study itself followed the process summarised below:



An initial 'long-list' of actions (an action, for example, is a single feature that could mitigate flood risk: such as, a pond, or a new pipe, or a wall) were drawn up and those which were clearly unfeasible screened out. An initial 'long-list' of 85 actions was considered, with 51 of these actions passing the screening stage.

Those actions which passed the screening stage were then combined, where possible, to form potentially feasible options (an option, for example, is a chain of actions that can work together to mitigate flood risk: such as, a new pipe which directs water into a small open channel leading into a storage pond which then discharges at a slow rate into a river). A total of 17 options were defined in this way to form the 'short-list'.

The 17 options were then subject to a detailed assessment process which included: computational modelling to determine the potential to reduce flood risk, understanding the economic saving from the potential reduced flood risk, estimating the cost of implementing the option, health & safety both in construction and operation, and constructability.

A total of 9 of the 17 options failed at the assessment stage, leaving 8 viable options. As some of the options mitigate flooding from the same source they could be condensed into a final suite of 5 preferred options. The 5 options comprise of 3 in Blairgowrie (Options A, C & E) and 2 (Options B & D) in Rattray – refer to the newsletter for more details.

#### **Q12. Why are options with a price tag of £2m+ being considered when cheaper solutions are available?**

In assessing the options in detail, two economic aspects were considered:

1. The flood damages avoided: these are the estimated savings to the economy over the next 100-years resulting from the reduction in the number of properties flooding (if the option were to be implemented) compared to the present-day risk.
2. The estimated cost: this is the total cost of implementing the option, inclusive of design fees, construction and any operation, maintenance and refurbishment costs over the next 100-years.

The comparison of (2) with (1) is called the 'cost-benefit ratio'. Therefore, all 5 of the options proposed at the drop-in sessions were found to save more money over their lifetime than they would cost to implement – regardless of their cost.

Another aspect which needs to be considered is that those options which are less costly typically protect a limited number of properties against smaller (but more frequent) flood events. Those with a greater cost typically protect more properties against a greater range of flood events, including those observed less frequently.

**Q13. Would the leaky dams (Option E) become blocked with silt, gravel and vegetation and then simply overflow as before?**

Leaky dams are designed to enable typical day-to-day flows to easily pass through at all times, holding back only those which are more extreme and may cause flooding. This means that there is always a constant flow through them, and they would be designed to allow sediment transport to continue to occur. Some sediment deposition may happen on the upstream side of the leaky dams outside of the river channel where they begin to hold water back during extreme events, but these would not result in a blockage of the main channel.

When holding water back, there is still a consistent low flow through the leaky dam. The temporary storage of water behind the dam would only overflow when the area behind it was full. However, even this scenario would result in a reduction in the flow downstream on the Rattray Burn and is still an improvement on the present-day situation in terms of flood risk.

Once water levels have returned to normal, inspections of the leaky dams can take place and any trapped silt, gravel and vegetation can be removed safely.

**Q14. Can the Rattray Burn be diverted along the farm field where it meets St. Finks Road down to where it meets its original route once again?**

This action was not considered feasible at this specific location for four reasons: Firstly, the cost of work would be significant and would necessitate the purchase of large areas of privately owned land as well as introducing new and amended crossings beneath some existing roads to tie-in with the Rattray Burn downstream. Secondly, construction would be disruptive and may require part-closure of some roads (including High Street) to facilitate new crossings. Thirdly, the tie-in point upstream may capture only around 15-25% of the catchment flows meaning it's cost-benefit ratio would be very low. Finally, the gradient on the fields is not as steep as the present route of the Rattray Burn meaning that it would need to be much larger to convey the same flows.

**Q15. The options presented tackle flooding from the Rattray Burn but how is runoff from farmland handled?**

Much of the farmland upslope of Rattray is inside the Rattray Burn catchment area. This means that surface water runoff from these areas naturally flow into the Rattray Burn. Options to mitigate flood risk was considered as part of the study – refer to Question 11.

However, thunderstorms (or extreme rainfall events) can generate significant volumes of rainfall over a very short timescale. This rainwater is unable to infiltrate directly into the ground as it exceeds the infiltration rate of the soil. Instead, it will flow overland, as surface water, into nearby ditches, field drains or adjacent land, transporting silt, stones, and debris.

Common law holds that a landowner whose property sits higher (Higher Owner) than an adjacent neighbouring property (Lower Owner) has the right to have natural water outside a controlled channel (such as a river or a burn) drain onto the lower land. The Lower Owner must accept the natural flow of water as long as the Higher Owner has not overstretched their right to the detriment of the Lower Owner i.e. altered the natural route of drainage, so it no longer follows the natural lie of the land.

**Q16. Is there a suitable position and angle of the speed hump proposed as part of Option A? Will gritters, snow ploughs and HGV's be able to continue using the road?**

The speed hump proposed as part of Option A, if progressed, will be designed to cater for all road users, including HGVs and snow ploughs in line with industry Standards.

**Q17. For Options A and B, how will the culvert further downstream on Cuttle Burn Den be able to handle the additional flows?**

The culvert where Cuttle Burn Den discharges into the River Ericht currently reaches its capacity at relatively low flows. This results in overtopping of the footpath crossing the culvert and water flowing overland into the River Ericht. Any increase in flows will not change this, and modelling has shown that they would result in an increased velocity and depth at the problem location. This is not much different from the present-day



situation, but the modelling has been used to inform some solutions that could be used to mitigate not just the additional flows that the proposed SWMP options would produce, but also yield a consequential betterment on the frequent flooding of the path observed in recent years.

**Q18. Have ‘unprecedented’ events been considered in the option development?**

We use a concept called the “return period” to understand how rare a flood event is and define its magnitude. This tells us about the probability of occurrence, which means the chance of that magnitude of flood happening in any given year. This is represented in the format of 1:2-year, or 50% chance of the flood occurring in any given year. This is a statistical representation and does not necessarily mean that this flood will only happen once every 2 years. Flooding is a natural event that can occur at any time, so it is possible to experience several greater magnitude events such as the 1:50-year over the space of a few years.

The events which were looked at as part of this study ranged from the 1:2-year (50% annual probability of occurrence) up to the 1:200-year (0.5% annual probability of occurrence). Events inclusive of likely future climate change were also considered.

No option can fully eliminate flooding, and some options can only reduce flooding up to a certain flood event magnitude.

## **Implementation**

**Q19. Can all of the options be implemented?**

The Council will now update and finalise the Blairgowrie and Rattray SWMP and report to the next available Climate Change and Sustainability Committee. Thereafter, the Council will implement the recommendations of the report, subject to funding.

The Council will submit details of the proposed options to SEPA for prioritisation (within the national list of flood schemes) and inclusion within the next Tay FRM Plan and Local FRM Plan covering the period from 2028 to 2036. This process is essential to secure the necessary capital grant funding to design and construct the proposed options.

Aside from the need to secure funding (as outlined above and in Question 20), further design works and community and stakeholder consultation will be required before statutory approval can be sought under the Flood Risk Management (Scotland) Act. Further detailed design work will be required before tenders can be issued and construction can take place. This study is the first phase in a long process required to deliver options identified in a SWMP.

**Q20. Can Scottish Ministers provide funding?**

The Council will submit details of the proposed options to SEPA for prioritisation (within the national list of flood schemes) and inclusion within the next Tay FRM Plan and Local FRM Plan covering the period from 2028 to 2036. This process is essential to secure the necessary capital grant funding to design and construct the proposed options.

At present, the Scottish Government provides capital grant funding for up to 80% of the capital cost of flood schemes on the national priority list, with the Council being responsible for the remaining 20%. This funding covers the project costs from outline design through to construction.

## **Other**

**Q21. Can the Council attend a Community Council meeting to provide more detail on the proposals?**

Two community drop-in sessions were carried out to disseminate the draft findings of the SWMP and offered the local community the opportunity to speak directly with Council officers, AECOM (design consultants), SEPA, Scottish Water and the Scottish Flood Forum. The Flooding Team have limited resources, but the Community Council can contact us via email ([Flood@pkc.gov.uk](mailto:Flood@pkc.gov.uk)) if you wish further information or attendance at a Community Council meeting.

**Q22. Can developers be held accountable for problems they cause or exacerbate?**

All developers must comply with relevant legislation and the conditions set out in their planning approval. Where they fail to do so the Council can take enforcement action.

**Q23. Could sandbags which have been placed outside houses be moved to a location that is more suitable? Wheelchair users are unable to pass on the footpath.**

The Council do not have the resources to uplift used sandbags. They are the responsibility of the property owner to arrange for their disposal.

If any unused sandbags remain in the area, or are blocking access, you can contact the Council on 01738 476476 to arrange for their removal.

**Q24. What should we do in the meantime until any options are progressed?**

Flooding is a natural phenomenon that can never be entirely prevented. However, action can be taken to reduce the risk of flooding and its impact.

Check if your property is at risk – flooding can affect more than just your property, it may impact on your community or your route to work. Use SEPA's Flood Maps and the flood maps included in our newsletter to find out if you're in an area at risk of flooding caused by rivers or surface water.

Check you are flood insured – if you find it difficult to obtain flood insurance that meets your needs, contact Flood Re - see <http://www.floodre.co.uk/homeowner/>  
They provide affordable insurance to households at the highest risk of flooding.

Follow the 5 steps to prepare:

1. Sign up to Floodline to receive advance notice of when and where flooding might happen. See also MET Office below. This provides alerts for heavy rainfall that may be more relevant for residents that can be impacted by flash flooding
2. Prepare a flood plan and put a family flood kit together so that everyone knows what to do if flooding happens.
3. Familiarise yourself with how to shut off gas, electricity and water supplies.
4. Keep a list of useful contact numbers, including your insurance company and utility providers.
5. Consider Property Flood Resilience (PFR) measures (including sandbags) for your property and ensure your insurance provides adequate cover for flood damage. [www.pkc.gov.uk/plp](http://www.pkc.gov.uk/plp)

The MET Office also provide a free notification service when they have issued weather warnings and information can be found at [www.metoffice.gov.uk/about-us/what/met-office-weather-app](http://www.metoffice.gov.uk/about-us/what/met-office-weather-app). This service will provide early warnings of severe weather that may not be covered by SEPA's Floodline but could still impact your property enabling you to take appropriate action.

SEPA and the MET Office now offer a 3-day flood forecast as part of the Scottish Flood Forecast - see <http://www.sepa.org.uk/scottishfloodforecast/>

The Scottish Flood Forum (SFF) is an independent organisation which supports individuals and communities at risk from flooding. You can contact SFF on 0131 563 9392. See their website at <https://scottishfloodforum.org/>

More advice is available on the following websites:

Perth & Kinross Council [www.pkc.gov.uk/flooding](http://www.pkc.gov.uk/flooding)

Scottish Water [www.scottishwater.co.uk/your-home/your-waste-water/sewer-flooding](http://www.scottishwater.co.uk/your-home/your-waste-water/sewer-flooding)

Floodline (SEPA) Tel 0345 988 1188; [www.floodlinescotland.org.uk/](http://www.floodlinescotland.org.uk/)

Flood Re [www.floodre.co.uk](http://www.floodre.co.uk)