#### PERTH AND KINROSS COUNCIL

#### **Environment Committee**

# 3 September 2014

# Flood Risk Management - Property Level Protection Pilot Scheme

# **Report by Depute Director (Environment)**

This report considers the role that flood protection products – known as Property Level Protection (PLP) - can play in improving the resilience of individual properties against flooding and recommends a pilot scheme for Perth and Kinross.

# 1. BACKGROUND / MAIN ISSUES

- 1.1 The Enterprise & Infrastructure Committee approved a report in August 2007 outlining the previous legislation in Scotland relating to flooding, the Council's responsibilities under this legislation and the assistance it endeavoured to give to communities, sometimes over and above any statutory requirements (Report No. 07/552 refers).
- 1.2 While responsibility to protect property from flooding lies with the owner, the Council endeavours to assist during flood events by supplying traditional sandbags to affected properties, even though this is not a statutory responsibility. It is the property owner's responsibility to undertake precautionary sandbagging or other measures in advance of anticipated flooding. Sandbags are only provided if property is being flooded or is in imminent danger of being flooded. At the same time as endeavouring to supply sandbags, the Council may assist by attempting to divert the flow of water and by pumping flood water away from properties. However, the resources for these activities are limited and therefore assistance has to be prioritised.
- 1.3 Once the threat of flooding has receded, it is normally the responsibility of the individual parties receiving the sandbags to dispose of them when they are no longer required.
- 1.4 Where residents have to be evacuated from their homes, the Council will coordinate the setting up of an emergency rest centre or arrange for temporary alternative accommodation.
- 1.5 The Council has carried out flood studies to investigate if flood schemes could be promoted and formal schemes have been implemented in a number of areas. However, it is not possible to implement flood schemes in all areas of flood risk.
- 1.6 The legislation relating to flooding in Scotland has changed in recent years.

#### **CURRENT POSITION**

- 1.7 **The Flood Risk Management (Scotland) Act 2009** (the 2009 Act) has introduced a more modern, coordinated and sustainable approach to flood risk management at both national and local levels.
- 1.8 The forthcoming Flood Risk Management Strategies and Local Flood Risk Management Plans will require to identify a wide range of structural and non-structural measures to manage flood risk. The 2009 Act requires that a range of actions be considered as shown in Table 1 below.

Structural	Non-Structural
Natural flood management, i.e.	Flood warning
restoration of natural features of	
catchment, including wetlands,	
forests and floodplains	
Clearance and repair works to rivers	Public awareness raising
Walls, embankments and other	Planning system and planning
defences	decisions
Barriers, barrages and other dams	Emergency response
or storage structures	
Drainage infrastructures	Relocation
	Flood insurance
	Compensation
	Flood proofing buildings,
	i.e. property level protection
	Temporary Defences

Table 1 - Examples of structural and non-structural actions to manage flood risk

- 1.9 It is not possible to implement engineered flood protection schemes in every flood risk area as such schemes tend to take a long time to implement, they may not be technically feasible, the costs may be prohibitive or a scheme may not be economically viable. In such cases, the other potential measures in Table 1 will be considered and so there will be more than just a simple choice to be made between a flood scheme, PLP or doing nothing. However, the appraisal of these other potential options is at a very early stage and is unlikely to offer communities anything in the short to medium term.
- 1.10 Whilst local authorities and other public agencies have responsibilities to manage flooding, the primary responsibility for avoiding or managing flood risk still remains with land and property owners.
- 1.11 The 2009 Act requires Scottish Environment Protections Agency (SEPA) and responsible authorities to act with a view to raising public awareness of flood risk. Individuals, businesses and communities can play an important role in making themselves more resilient and helping to reduce the impact of flooding. Obviously this must be supported through improved awareness and access to information on flood risk and the actions individuals can take.

1.12 Flood protection products – known as Property Level Protection (PLP) - can play an important role in improving the resilience of individual properties against flooding.

# PROPERTY LEVEL PROTECTION (PLP)

- 1.13 The Scottish Government is encouraging more local authorities to set up PLP Schemes to reduce the impact of flooding and make communities more resilient. The Government's statutory guidance document 'Delivering Sustainable Flood Risk Management' establishes five overarching outcomes for Scotland, and the following two are directly relevant to PLP:
  - a) A reduction in the number of people, homes and property at risk of flooding as a result of public funds being invested in actions that protect the most vulnerable and those areas at greatest risk of flooding.
  - b) A well informed public who understand flood risk and take actions to protect themselves, their property or their businesses.
- 1.14 PLP flood products can improve on sandbags which are considered to be rather ineffective and have disposal issues. Sandbags have a relatively short life expectancy due to the nature of the materials involved in their construction. Large stocks of sandbags are therefore not kept as a matter of course. The stocks can be added to, by filling additional sandbags as they are required, but it must be recognised that the resources which can be dedicated to this task are finite.
- 1.15 There are better options available which are designed to protect a property from flooding. The four main types are:-
  - 1. Flood gates and barriers for doors and airbricks;
  - 2. Non-return valves for domestic and foul drainage systems;
  - 3. Sump pumps;
  - 4. Waterproofing and sealants.
- 1.16 The products are generally split into resistance measures (which limit water entry) and resilience measures (which allow water entry). One issue with these products is the need for the resident to be present to install them and also for adequate flood warning to ensure that they are correctly installed prior to flooding. Some products are available that are automatic, e.g. self-raising air brick covers, or have to be left in place permanently.
- 1.17 PLP has not yet been taken up as widely in Scotland as in other areas of the UK. There is a lack of awareness of PLP among the public as well as some uncertainty over the position with regard to insurance.

# 2. PROPOSALS

- 2.1 The implementation of a PLP pilot scheme will be carried out in liaison with the Scottish Fire and Rescue Service (SFRS) and the Scottish Flood Forum (SFF). SFRS are keen to combine this with their existing home fire safety visits.
- 2.2 The following stages are proposed.

# **APPRAISAL**

- 2.3 Effective management is required within the community to secure the agreement of residents and ensure that they sign up to the proposed Scheme.
- 2.4 A leaflet will be distributed to houses in the chosen areas explaining how the pilot scheme will work. Additionally, householders can access the information through a link on the Council's Website in the flooding section.
- 2.5 The pilot scheme will provide clear and concise guidelines relating to the responsibilities between the Council, SFRS, the homeowner, the supplier of the PLP flood products, and the installer of the products.
- 2.6 Residents will be required to sign a Disclaimer confirming that the Council and SFRS have no responsibility for the installation or operation of these products, as the primary responsibility for avoiding or managing flood risk still remains with land and property owners. The SFF already have their own disclaimer in place, which can be viewed on their website.

## **SELECTION**

- 2.7 This stage involves a property survey and the procurement of the flood products.
- 2.8 In the pilot area, homeowners will be able to request advice on the selection of suitable flood products. The SFRS will carry out a free flood risk survey of their property to identify the main areas where water can enter and will advise on ways of mitigating this risk. The survey will also highlight the amount and type of suitable PLP flood products or protection measures that could be adopted for this, and will also include a demonstration of suitable product samples. These samples will be certified to the BSI Kitemark and will be purchased by the Council. The SFRS will produce a survey report for the householder advising them of suitable PLP flood products.
- 2.9 Where there are already insurance issues, the SFF will produce a preinstallation report for the householder's insurance company. This will ensure that the insurance company is satisfied with the proposed flood products and the resident can take full advantage of any insurance benefits.

- 2.10 It is important that those surveying the property and specifying the products are suitably trained. The SFF therefore arranged to train a number of SFRS staff on 11 August 2014.
- 2.11 If the resident wishes to proceed with the procurement of the recommended products then they will be required to sign the Council's purchase request form along with the Council and SFRS Disclaimer.
- 2.12 The Council's role in this pilot, once the flood risk survey has been completed, is to use its buying powers to procure the PLP flood products.
- 2.13 This pilot scheme will allow the community to access the Council's buying potential for PLP flood products. Residents will be asked to pay for the PLP products although this will be at a reduced price, secured through bulk buying. The cost of the products procured through the pilot scheme will therefore remain cost neutral to the Council.
- 2.14 The Council will arrange for a bulk purchase of the appropriate products on behalf of householders once significant orders have been received. This will be carried out via the Quick Quote online quotations facility within Public Contracts Scotland. If there is not sufficient take up of the scheme, then the Council may need to review its position.

#### INSTALLATION

- 2.15 Installation of the flood products will involve a supplier survey followed by installation then a handover to the resident.
- 2.16 The flood products will be installed at the residential properties by a qualified installer/contractor appointed by the resident. The SFF will advise residents on suitable installers. The householder can also make reference to the trusted trader scheme operating in Perth & Kinross.

#### **AFTERCARE**

- 2.17 Once the flood products have been installed, it is essential that training and explanation is provided to the resident on how to use the products, otherwise properties may be flooded despite protection being installed.
- 2.18 This activity will be carried out by the SFF and could be developed in the longer term as part of a community resilience plan.
- 2.19 SFF will carry out an inspection of the property after the products have been installed and will produce, and sign off, a final report. This is essential to ensure that the resident can take advantage of any potential insurance benefits.

#### PROPOSED LOCATION

- 2.20 To be eligible for the pilot scheme, the chosen community must be at significant risk of flooding. The pilot scheme will target residential properties within an area that meet this criteria and will not include commercial and business properties unless they were integral to protecting households, for example in a terraced street.
- 2.21 An assessment has been made of the areas of highest flood risk known as Potentially Vulnerable Areas (PVAs) within Perth & Kinross using information provided by SEPA as part of the current appraisal process under the Flood Risk Management (Scotland) Act 2009.
- 2.22 Each PVA was assessed based on the following criteria:
  - i. Calculated annual average flood damages;
  - ii. Whether a flood protection scheme is in place already;
  - iii. Whether a resilience group is in place to help coordinate the PLP pilot scheme.
- 2.23 The PVAs chosen based on the results of this assessment are PVA numbers 08/03 (Aberfeldy and Pitlochry) and 08/14 (Comrie and Crieff).

#### **USE OF SANDBAGS**

- 2.24 The PLP Schemes is to reduce the impact of flooding and make communities more resilient. The use of PLP products actually speeds up the deployment times compared to the traditional emergency response of the deployment of sand bags and this benefit will be highlighted during the home fire / flood safety visits. However, there is still a risk that the community within the pilot area may still want to rely on the Council to provide sandbags in the event of a flood, and therefore may not take any action themselves or engage with the pilot scheme. To address this, some local authorities have introduced a 'no sandbag policy' which has had the immediate effect of placing the responsibility for property protection back with the property owner. However, where it can assist, the Council will endeavour to continue to support communities, but this will only be within the resources that are available.
- 2.25 It is therefore proposed that the Council will continue to supply traditional sandbags in emergency situations.

# **EVALUATION OF PILOT SCHEME**

2.26 It is proposed to evaluate the success of the pilot scheme following a period of six months. If the pilot scheme proves to be successful within the chosen locations then a recommendation will be made to the Council that it is extended to all of Perth and Kinross.

# 3. CONCLUSION AND RECOMMENDATIONS

#### CONCLUSION

- 3.1 This report examines the benefits of PLP flood products and recommends that a pilot scheme be set up in Perth and Kinross.
- 3.2 There are many PLP flood products available on the market which can improve on the traditional approach of using sandbags.
- 3.3 An assessment of potential locations for the pilot scheme has been made. While there are a number of potential locations, the most suitable areas are considered to be Aberfeldy, Comrie, Crieff and Pitlochry.
- 3.4 Disclaimers have been drafted separately for both the Council and SFRS to confirm the liabilities of the various parties involved in the pilot scheme.
- 3.5 The Council will continue to supply traditional sandbags in emergency situations.
- 3.6 The benefits of this pilot scheme would be as follows:
  - It would provide residents with access to a relatively inexpensive and effective means of reducing flood risk that can be deployed quickly;
  - It will limit the impact and consequences of flooding;
  - It will enable and stimulate communities at significant risk of flooding to enhance their own preparedness to flooding, thereby improving the community's overall resilience;
  - It will lead to economic gains and potential reductions in insurance costs within communities;
  - It will bring more peace of mind within those communities;
  - It will reduce the burden on the Council and the emergency services during flood events.
- 3.7 If the pilot scheme proves to be successful within the chosen locations, then a recommendation will be made to the Council that it is extended to all of Perth and Kinross.

# **RECOMMENDATIONS**

- 3.8 The Environment Committee is asked to:
  - (i) Note that while Local Authorities and other public agencies have responsibilities to manage flooding, the primary responsibility for avoiding or managing flood risk still remains with the land and property owners
  - (ii) Note the benefits that PLP can deliver in making properties more resilient to flooding.

- (iii) Agree to the proposals for a PLP pilot scheme in Perth & Kinross.
- (iv) Agree to operate the PLP pilot scheme in Aberfeldy, Comrie, Crieff and Pitlochry.
- (v) Note that the pilot scheme may be extended to all of Perth and Kinross if it proves to be successful within the above selected locations.
- (vi) Request that a further report is submitted to the Committee following the 6 month period, with recommendations based on the experience of the pilot.

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**Approved** 

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Barbara Renton	Depute Director (Environment)	22 August 2014

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# 1. IMPLICATIONS, ASSESSMENTS, CONSULTATION AND COMMUNICATION

Strategic Implications	
Community Plan / Single Outcome Agreement	Yes
Corporate Plan	Yes
Resource Implications	
Financial	Yes
Workforce	Yes
Asset Management (land, property, IST)	Yes
Assessments	
Equality Impact Assessment	Yes
Strategic Environmental Assessment	Yes
Sustainability (community, economic, environmental)	Yes
Legal and Governance	Yes
Risk	Yes
Consultation	
Internal	Yes
External	Yes
Communication	
Communications Plan	Yes

# 1. Strategic Implications

# Community Plan / Single Outcome Agreement

- 1.1 The proposals relate to the delivery of the Perth and Kinross Community Plan / Single Outcome Agreement in terms of the following priorities:
  - (ii) Developing educated, responsible and informed citizens
  - (v) Creating a safe and sustainable place for future generations

# Corporate Plan

- 1.2 The proposals relate to the achievement of the Council's Corporate Plan Priorities:
  - (ii) Developing educated, responsible and informed citizens;
  - (v) Creating a safe and sustainable place for future generations.

# 2. Resource Implications

# Financial

2.1 The Head of Finance has been consulted and has indicated agreement with the proposals.

- 2.2 The Budget Review Group recently allocated £20k within the Revenue Budget for the PLP pilot scheme for 2014/15.
- 2.3 In addition to the cost of the workforce implications mentioned below, it is anticipated that the remainder of the budget will be taken up with training costs, advertising/leaflets, and the purchase of 3 sets of product samples.
- 2.4 Should the PLP pilot scheme be determined a success and the scheme is to be rolled out to the rest of the PKC area, then revenue monies for operating the scheme after the 2014/15 financial year will have to be identified.

# Workforce

- 2.5 The Corporate Human Resources Manager has been consulted and has indicated agreement with the proposals.
- 2.6 A temporary member of staff is required to manage the Scheme during the pilot. A member of staff is currently involved on a temporary basis (1 day per week). The associated staff costs will be charged to the already identified revenue budget.

# Asset Management (land, property, IT)

2.7 There are no land, property or IT implications in delivering the proposals put forward in this paper.

## 3. Assessments

## **Equality Impact Assessment**

- 3.1 Under the Equality Act 2010, the Council is required to eliminate discrimination, advance equality of opportunity, and foster good relations between equality groups. Carrying out Equality Impact Assessments for plans and policies allows the Council to demonstrate that it is meeting these duties.
- 3.2 The proposals have been considered under the Corporate Equalities Impact Assessment process (EqIA) with the following outcome:
  - (i) Assessed as **not relevant** for the purposes of the EqlA.

## Strategic Environmental Assessment

- 3.3 The Environmental Assessment (Scotland) Act 2005 places a duty on the Council to identify and assess the environmental consequences of its proposals.
- 3.4 The proposals have been considered under the Act and no further action is required as it does not qualify as a PPS as defined by the Act and is therefore exempt.

# Sustainability

- 3.5 Under the provisions of the Local Government in Scotland Act 2003 the Council has to discharge its duties in a way which contributes to the achievement of sustainable development. In terms of the Climate Change Act, the Council has a general duty to demonstrate its commitment to sustainability and the community, environmental and economic impacts of its actions.
- 3.6 A successful outcome of the application of the PLP pilot scheme would be the improvement of the flood resilience of the protected property to the risk of future flooding.

# Legal and Governance

- 3.7 The Head of Legal has been consulted in the production of this paper.
- 3.8 As part of the implementation of the PLP pilot scheme there will be relevant Disclaimers issued by the Council and other participating parties to clarify that any take up of this scheme is entirely at the risk of the property owner.

# Risk

3.9 Risks associated with the implementation of this project will be managed through appropriate communication and project management.

## 4. Consultation

#### Internal

4.1 Legal Services
Procurement Team
Health, Safety & Wellbeing Manager
Local Elected Members

## External

4.2 The Scottish Fire & Rescue Service (SFRS)
The Scottish Flood Forum (SFF)

## 5. Communication

5.1 All identified communities will be engaged through letter drops, the Council website, community councils, and direct contact from all agencies involved in delivering this PLP pilot Scheme.

## 2. BACKGROUND PAPERS

None.

# 3. APPENDICES

None.