

Flood Resilience Strategy

Overview

General Comments

Scottish Water welcomes the shift in strategy to support a transition to designing and supporting flood resilient places. This is an important piece of work which sets the direction to encourage a range of stakeholders to deliver actions at various scales which can reduce the risk to communities across Scotland.

Scottish Water supports the framing of flood resilience through the lens of climate adaptation. This should enable the management of water to be planned and delivered more effectively through a wider range of activities.

Scottish Water welcome reference to the need to consider future flood risk in designing and developing our towns and cities, and land management practices in rural areas. It is important for us to think of our water catchments as connected systems from source to sea. Making space for water in a changing climate means understanding where and how to act in all environments across a catchment to support resilience.

Detailed Response

Specific Comments

The case for change and the narrative behind the flood resilience strategy is encouraging.

Care needs to be taken to ensure that an appropriate balance is created between “fixing flooding problems” and creating flood resilient places, as there will be a requirement to use both approaches – many chronic flooding problems will continue to require significant investment and “traditional grey infrastructure.”

In addition, with respect to climate change it will become important to understand how the range of conditions may impact vulnerability, and the flood responses of landscapes.

To meet the ambitions outlined in the strategy, significant cross sectoral and organisational partnership working will be required. The upfront resource required for both planning and delivery activities should be carefully considered.

GUIDING PRINCIPLES	
1.	<p>Do you support the change from fixing flooding problems to creating flood resilient places?</p> <p>Yes/No - please give the reason(s) for your answer.</p>
<p>YES</p> <p>Scottish Water supports a transition from fixing problems to creating flood resistant places – recognising though that there will be a need for projects to fix known problems.</p> <p>Water management is fundamentally about land management in both rural and urban environments. Creating flood resilient places, with a focus on improving natural systems to accommodate flows, and a focus on blue-green infrastructure in urban areas, brings opportunities to deliver multiple benefits such as urban cooling and providing a home for biodiversity, and can also encourage more individual action.</p> <p>Scottish Water is pleased to note the clear statement that everyone has a part to play in flood resilience. Effective dialogue and engagement with potentially affected communities is critical to understanding the needs and opportunities within communities; to help community members develop an understanding of the risks; to understand what they can do; and to empower communities to take appropriate steps.</p> <p>In our response to the recent SNAP3 consultation we set out that consistent communication around flooding and future climate risk is vital and, whilst welcoming reference to it, we would like to see more on how this might be achieved.</p>	
2.	<p>How can decision makers ensure that actions taken to improve flood resilience align with the aims of a Just Transition to achieve a fairer, greener future?</p>
<p>Ensuring people and communities (not just impacts on individual properties) are at the forefront of planning considerations will contribute to ensuring a fair and equitable transition to net zero, and a resilient future. This requires time to ensure effective engagement with communities and internal and external stakeholders, in order to break down silo-based working by identifying overlaps and the multiple benefits of working across projects and stakeholders.</p> <p>The development of nationally consistent metrics for the feasibility and optioneering phases of studies is required to allow consideration a wide range of benefits and impacts, including the aims of a Just Transition. Guidance on how this should be done would be beneficial to ensure a consistent approach is applied across Scotland by both local authorities, Scottish Water and others.</p>	

	<p>Who do you think has a role in Scotland to help us become more flood resilient and to help us adapt to the impacts of climate change?</p> <p>(Please rank from most to least important):</p> <p>a. Individuals - 4</p> <p>b. Homeowners - 4</p> <p>c. Businesses - 4</p> <p>3. d. Scottish Government - 1</p> <p>e. Scottish Water - 2</p> <p>f. Local Authorities - 1</p> <p>g. Scottish Environment Protection Agency (SEPA) - 3</p> <p>h. Land owners/land managers - 2</p> <p>i. Farmers and crofters - 4</p> <p>j. House builders/developers - 3</p> <p>k. Community groups - 4</p> <p>l. Other (please specify)</p>
	<p>All listed have a role, plus:</p> <p>l. (other) – ranked 5</p> <ul style="list-style-type: none"> • Infrastructure owners / managers (Transport Scotland / Network Rail) • Mortgage brokers and providers • Insurance Industry
	<p>MAIN THEMES</p>
<p>4.</p>	<p>What support do communities need to become involved/engaged in climate adaptation and flood resilience planning</p>
	<p>Scottish Water suggests that communities require knowledge about current and future risks (and responsibilities) and for this to be communicated in a way that is transparent and easy to understand.</p> <p>Well-timed community-engagement is required, with the right level of information. Scottish Water acknowledges it can be very difficult to judge when and what this is.</p>
<p>5.</p>	<p>What should local authorities be doing to ensure meaningful community participation when taking decisions about improving flood resilience?</p>
	<p>Scottish Water considers that being transparent regarding priorities, funding challenges, responsibilities and likely delivery timescales is a key part of building trust and avoiding setting unrealistic expectations.</p> <p>Clear and consistent messaging should be provided from Local Authorities to communities. To facilitate this, Local Authorities require appropriate resourcing to support community participation if this is designated as a priority under the flood resilience strategy.</p>

6.	<p>What would help communities understand their current and future flood exposure and the range of options available to them to help them become more flood resilient?</p> <p>(Please rank from most to least important)</p> <p>a. Access to flood maps showing current and future flood exposure - 1</p> <p>b. Access to local flood history - 2</p> <p>c. Access to information on community “self-help” options - 4</p> <p>d. Access to flood resilience advice/support - 4</p> <p>e. Access to information on the range of flood resilience options available for their community - 5</p> <p>f. Other (please specify) - 3</p>
<p>F (other) ranked 3 - Increasing awareness of potential risks to communities – potentially through including flood risk as an assessment criteria within a home report or having a greater prominence in the local development planning process.</p>	
7.	<p>What actions could communities take to improve their flood resilience?</p> <p>(Please rank from most to least important)</p> <p>a. Set up a local community flood resilience group - 3</p> <p>b. Develop a local community flood response plan - 2</p> <p>c. Share local knowledge of what happens during floods with organisations like SEPA and local authorities - 1</p> <p>d. Link up with their local climate action group - 4</p> <p>e. Other (please specify)</p>
<p>e. (other) ranked 1 - We would recommend adding Scottish Water to option C</p>	
8.	<p>What actions could householders/businesses take to improve their flood resilience?</p>

	<p>(Please rank from most to least important)</p> <p>a. Learn about flood exposure in their area - 1</p> <p>b. Invest in property resilience measures, such as installing flood gates, raising electrical wall sockets and using flood resilient building materials - 4</p> <p>c. Join a community flood action group - 5</p> <p>d. Sign up to Floodline for flood alerts and warnings - 3</p> <p>e. Seek advice on flood resilience - 5</p> <p>f. Make sure they have flood insurance - 5</p> <p>g. Other (please specify)</p>
	<p>G (other) ranked 2 - Prepare a flood resilience plan for their home/business</p>
<p>9.</p>	<p>What would you do to improve your personal flood resilience?</p> <p>(Please rank by importance)</p> <p>a. Find out how exposed you are to floods - 1</p> <p>b. Sign-up to Floodline for flood alerts and warnings - 4</p> <p>c. Have a personal flood plan ready to put into action when flooding is expected - 3</p> <p>d. Ensure you know what to do if your property was to get flooded - 3</p> <p>e. Check your flood exposure before buying or renting a property - 1</p> <p>f. Make sure you have flood insurance - 2</p> <p>g. Other (please specify)</p>
	<p>PLACES</p>
<p>10.</p>	<p>How can we ensure that our places are designed to be flood resilient in future?</p>
	<p>As far as possible flooding should be considered at a system level – i.e. a water catchment from natural to built environment. We need to understand current risks and vulnerabilities, e.g. how water flows within a catchment, and opportunities for attenuation, storage and flow management across the system. We also need to understand future climate risks and timeframes to be clear on what future we are planning for e.g. from 2 to 4 degrees in the 21st Century, and what this might mean for water flows. This should set the context for planning and designing for flood resilient places.</p> <p>Scottish Water believes it should be a requirement for all urban realm projects to include metrics and targets to deliver flood resilience measures. This will influence delivery of improved water management through all urban realm projects, rather than depending on issues to be dealt with by specific flooding projects. For example:</p> <ul style="list-style-type: none"> • create funding mechanisms and grants which can be accessed to provide

flood resilience – particularly in urban areas.

- ensure that places at risk of flooding have a clear plan for how to act during and after exceedance events and increase awareness of the function of areas which are intended to flood during these circumstances (such as parks and roads).
- improve public information on the results of climate change assessments which show that flood risk (and the increase in surface water flood risk in particular) is continually recognised as the biggest threat to Scotland.
- consider the removal of permitted development rights to prevent actions making the baseline situation worse.

11. **To what extent do you agree that there is a need to make space for water to improve the flood resilience of our villages, towns and cities?**

a. **Strongly agree - x**
 b. **Mostly agree**
 c. **Mostly disagree**
 d. **Strongly disagree**

12. **Which of the following do you think would be helpful?**

(Please rank by importance)

a. **Increasing the use of sustainable drainage systems - 3**
 b. **Creating blue and green drainage networks to enhance existing drainage systems - 1**
 c. **Using available greenspace such parks and sports pitches to help soak up and store water in the heaviest rainfall events to prevent drainage systems becoming overwhelmed - 2**
 d. **Creating raingardens in public parks and streets - 3**
 e. **Other (please specify)**

e. **(other) ranked 2** - Pro-actively use other existing public open space, including roads, to store and route flood exceedance as part of the design of our places.

13. **Which of the following do you think would be helpful?**

(Please rank by importance)

a. **Using soil, and land management techniques to slow down the flow of water and increase infiltration and water retention - 2**

	<p>b. Using river and floodplain management techniques such as reintroducing meanders to rivers to slow flow and enhancing floodplains and wetlands to increase storage - 1</p> <p>c. Increasing woodland to help intercept, slow and store water throughout a catchment - 3</p> <p>d. Restoring peatlands to absorb, store and release water slowly. – 4</p> <p>e. Enhancing natural dune systems to maintain a natural barrier that reduces the risk of tidal inundation - 4</p> <p>f. Managing saltmarsh and mudflats in estuaries to store water and dissipate wave energy - 4</p> <p>g. Other (please specify)</p>
14.	<p>Should moving communities away from areas with the highest exposure be considered as an option?</p> <p>Yes/No - please give the reason(s) for your answer.</p>
	<p>YES – all options should be considered.</p> <p>This should not be restricted to floodplains and coastal areas, but also applied to urban areas as part of surface water management planning.</p> <p>The impact on the remaining community needs to be carefully considered, and it would be beneficial if there was national guidance on how this process should be applied, including funding and legal considerations, to provide some consistency of approach across organisations.</p>
	<p>PROCESSES</p>
15.	<p>How might information, guidance, direction and technical support be provided for communities and flood management organisations?</p>
	<p>A single source point of contact (potentially a website or portal) would provide consistent information for communities and to reduce delayed responses by queries not being routed to the relevant people/organisations.</p>
16.	<p>How can we improve efficiency, consistency and value in delivering flood actions?</p>
	<p>Scottish Water suggests:</p> <ul style="list-style-type: none"> • a framework which enables actions to be planned and delivered quickly, frequently and in an opportunistic manner, with access to clear routes to funding streams to enable this approach. • a single national organisation responsible for flood risk and managing drainage networks. • the development of partnerships which align planning activities and investment across stakeholders with a focus on creating water resilient places (such as MGSDP, ELSDP and Water Resilient Dundee). • the development of a single platform for reporting flooding, co-ordinating

emergency response (local authorities, Scottish Water and Scottish Fire and Rescue Service) and investigating flood mechanisms. This would allow all agencies to share the same information and reduce multiple agencies attending during flood events and only trying to resolve single issues relating to their responsibilities.

- the development of closer relationships with the consultant organisations and the development community who plan and deliver the majority of projects on behalf of public bodies in Scotland.

17. Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on?

(Please rank by importance)

- a. Maintaining existing flood protection - 2**
- b. Small flood protection schemes - 3**
- c. Natural flood management - 3**
- d. Blue and green infrastructure (e.g. multi-purpose green space, such as floodable sports pitches) - 3**
- e. Flood forecasting and warning - 4**
- f. Property level flood resilience measures - 1**
- g. Supporting local community flood resilience groups - 4**
- h. None – all funding should be spent on large flood protection schemes - 5**
- i. Other (please specify)**

i. – (other) ranked 1 - A balanced, risk-based, approach should be adopted as circumstances will vary depending upon specific circumstances.

18. Do you think there is enough evidence and information to support the delivery of a broader range of flood resilience actions?

Yes/No – If No, please let us know what you think our evidence and information gaps are.

YES – both within Scotland and learning from elsewhere.

For example, a consistent approach to estimating costs and wider benefits of blue-green infrastructure would be valuable.

Short term mitigation, such as property level protection, can have immediate impact to improve resilience for communities.

19.	<p>What other funding sources or mechanisms could be used to support flood resilience?</p> <p>(Please rank by importance)</p> <p>a. Financial contributions from those who directly benefit from improved flood resilience (e.g. private sector/businesses) - 1</p> <p>b. All new development makes a contribution to improving flood resilience - 2</p> <p>c. Support natural flood management through payments to farmers, crofters and land managers - 2 (for example, Forestry Grant Scheme, the future agricultural support framework or PeatlandACTION payments)</p> <p>d. Other (please specify)</p>
	<p>d. (other) ranked 1 - Grant funding for projects that are not core 'flooding' projects, but that provide flood risk benefits.</p>
20.	<p>What is your main concern about flooding?</p>
	<p>Scottish Water's main concern is the lack of small and medium scale action since the introduction of the FRM Act, particularly to manage risk from surface water sources.</p>
21.	<p>What one thing would do the most to improve Scotland's flood resilience?</p>
	<p>Scottish Water supports a legislative framework which enables and incentivises consistent and gradual flood resilience actions to be delivered by a wide range of stakeholders.</p>

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