

# Appendix 1 – Scottish Government’s Flood Resilience Strategy Consultation response

Response ID ANON-2JQM-R4JQ-U

Submitted to Flood Resilience Strategy: consultation  
Submitted on 2024-08-13 15:54:42

Consultation structure

Guiding principles

1 Do you support the change from fixing flooding problems to creating flood resilient places?

Not Answered

Why/Why not? Please limit your answer to 500 characters or less.:

Neither Yes or No, both should be considered and prioritised as funding and resources allow.  
Resilience is a long term approach - there are and will be for some time to come places that problems need "fixing" that resilience is not possible to "retro-fit" in the medium term

2 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?

Please limit your answer to 1000 characters or less.:

Technically it may be necessary to use non green solutions to be deliver flood resilience however PAS 2080 can provide guidance on managing the impact.

Appropriate weighting applied to benefit cost calculations for flood resilience measures in socially deprived area, to ensure fairness and tackle inequality.

Flood resilience schemes must consider sustainability for future generations and schemes should reference Just Transition principles and implement these.

3 Who do you think has a role in Scotland to help us become more flood resilient and help us adapt to the impacts of climate change?

Q3 answer - Individuals:

11

Q3 answer - Homeowners:

7

Q3 answer - Businesses:

10

Q3 answer - Scottish Government:

1

Q3 answer - Scottish Water:

5

Q3 answer - Local Authorities:

3

Q3 answer - Scottish Environment Protection Agency (SEPA):

2

Q3 answer - Landowners/Land managers:

6

Q3 answer - Farmers and crofters:

8

Q3 answer - Housebuilders/developers:

4

Q3 answer - Community groups:

9

Q3 answer - Other (please specify in text box below):

12

If you selected 'Other', please specify your answer:

Specialist consultants, architects, engineers

## Main themes

### People

4 What support do communities need to become involved/engaged in climate adaptation and flood resilience planning?

Please limit your response to 1000 characters or less.:

A specialised resourced Resilience Team created within the Local Authority that can engage with communities via Community Councils to promote community resilience. This support can take the form of;

Integrated Emergency Planning Workshops to accommodate demands from Community Groups

Providing online information such as how to create a community emergency plan

The role of the Scottish Flood Forum (SFF) should also be supported in their works to support communities affected by flooding.

5 What should local authorities be doing to ensure meaningful community participation when taking decisions about improving flood resilience?

Please limit your response to 1000 characters or less.:

Internally, within local authorities the formation of flood risk liaison groups with representatives from responsible departments to ensure a single approach. These liaison groups could engage with community groups and other stakeholders.

Support Resilience Team in the activities previously mentioned.

Extensive engagement with the communities on flood resilience

6 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?

q6 answer - Access to flood maps showing current and future flood exposure:

1

q6 answer - Access to local flood history:

2

q6 answer - Access to information on community 'self help' options:

4

q6 answer - Access to flood resilience advice/support:

3

q6 answer - Access to information on the range of flood resilience options available for their community:

5

q6 answer - Other (please specify in the text box below):

6

If you selected 'Other', please specify your answer:

Links to other flood groups

7 What actions could communities take to improve their flood resilience?

Q7 Answer - Set up a local community flood resilience group:

2

Q7 Answer - Develop a local community flood response plan:

3

Q7 Answer - Share local knowledge of what happens during floods with organisations like SEPA and local authorities:

1

Q7 Answer - Link up with their local climate action group:

4

Q7 Answer - Other (please specify in text box below):

5

If you selected 'Other', please specify your answer:

8 What actions could householders/businesses take to improve their flood resilience?

q8 answer - Learn about flood exposure in their area:

1

q8 answer - Invest in property resilience measures, such as installing flood gates, raising electrical wall sockets and using flood resilient building materials:

2

q8 answer - Join a community flood action group:

5

q8 answer - Sign up to Floodline for flood alerts and warnings:

6

q8 answer - Seek advice on flood resilience:

4

q8 answer - Make sure they have flood insurance:

3

q8 answer - Other (please specify in text box below):

7

If you selected 'Other', please specify your answer:

Flood insurance is only available to those who are on SEPA flood/ designated areas

9 What would you do to improve your personal flood resilience?

q9 answer - Find out how exposed you are to floods:

q9 answer - Sign up to Floodline for flood alerts and warnings:

q9 answer - Have a personal flood plan ready to put into action when flooding is expected:

q9 answer - Ensure you know what to do if your property was to get flooded:

q9 answer - Check your flood exposure before buying or renting a property:

q9 answer - Make sure you have flood insurance:

q9 answer - Other (please specify in the text box below):

If you selected 'Other', please specify your answer:

Not applicable as we are replying on behalf of a Local Authority

## Places

10 How can we ensure that our places are designed to be flood resilient in future?

Please limit your response to 1000 characters or less.:

This starts with Scottish Government Planning Legislation, policies and guidance to be continually updated to reflect current and future climate conditions.

SEPA must enforce the above to ensure these are implemented.

Local Authority role is to introduce and enforce appropriate planning policies however this requires time and resources for training, identifying locations and exploring options for resilience.

Please also see Argyll and Bute Council Additional Statement on Flood Resilience Consultation

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?

Strongly agree

12 In urban areas, we should make more use of our greenspace and urban watercourses to help manage increased rainfall and reduce the impacts of surface water flooding. Which of the following do you think would be most helpful?

Which of the following do you think would be most helpful? - Increasing the use of sustainable drainage systems:

1

Which of the following do you think would be most helpful? - Creating blue and green drainage networks to enhance existing drainage systems:

3

Which of the following do you think would be most helpful? - Using available greenspace such as parks and sports pitches to help soak up and store water in the heaviest rainfall events to prevent drainage systems becoming overwhelmed:

2

Which of the following do you think would be most helpful? - Creating raingardens in public parks and streets:

4

Which of the following do you think would be most helpful? - Other (please specify in the text box below):

5

If you selected 'Other', please specify your answer:

13 If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful?

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Using soil, and land management techniques to slow down the flow of water and increase infiltration and water retention.:

2

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Using river and floodplain management techniques such as re-introducing meanders to rivers to slow flow and enhancing floodplains and wetlands to increase storage.:

3

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Increasing woodland to help intercept, slow and store water throughout a catchment.:

4

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Restoring peatlands to absorb, store and release water slowly.:

1

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Enhancing natural dune systems to maintain a natural barrier that reduces the risk of tidal inundation:

6

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Managing saltmarsh and mudflats in estuaries to store water and dissipate wave energy.:

5

If we are to make more use of our river catchments and coastal areas to increase our flood resilience, which of the following do you think would be most helpful? - Other (please specify in the text box below):

7

If you selected 'Other', please specify your answer:

14 Should moving communities away from areas with the highest exposure be considered as an option?

Yes

Please explain your answer in 1000 characters or less.:

Would only be considered as a final option if costs of mitigation measures were prohibitive.

This is the natural evolution of a changing climate / increasing water levels where it will become unsustainable to prevent floods in the most exposed areas. Long term planning is required along with long term budgetary confidence.

## Processes

15 How might information, guidance, direction and technical support be provided for communities and flood management organisations?

Please limit your response to 1000 characters or less.:

An independent centralised (Scottish) advisory service that will assist communities and flood teams in dealing with the complexity of flooding and environmental issues associated with flood mitigation works

16 How can we improve efficiency, consistency and value in delivering flood actions?

Please limit your response to 1000 characters or less.:

Clearer legislation and guidance aligned with centralized advisory service. Close supervision of construction measures. In less than 5 years Climate Change guidance has changed thereby compromising outcomes of previous flood studies carried out under the Local Flood Risk Management Plans. This will result in additional time and costs for review / revisions. When funding is allocated to Flood Protection Schemes timescales must be considered such that deliveries take into account the time needed for adequate designs and consents

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

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Maintaining existing flood protection:

1

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

2

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Natural flood management:

7

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Blue and green infrastructure (e.g. multi-purpose green space, such as floodable sports pitches):

5

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Flood forecasting and warning:

6

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Property level flood resilience measures:

4

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Supporting local community flood resilience groups:

3

Other than large flood protection schemes, what other flood resilience actions should we focus on supporting/spending available funding on? - Other (please specify in the text box below):

8

If you selected 'Other', please specify your answer:

Local Authorities

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

No

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

Not enough skilled staff to investigate and gather evidence

Not enough budget to cover staff time and specialised consultants to progress any prioritised works Not enough time due to funding constraints i.e. short spending timescales

Not enough clarity on what Flood Resilience is to allow appropriate evidence and information to be gathered.

19 What other funding sources or mechanisms could be used to support flood resilience?

What other funding sources or mechanisms could be used to support flood resilience? - Financial contributions from those who directly benefit from improved flood resilience (e.g. private sector/businesses):

1

What other funding sources or mechanisms could be used to support flood resilience? - All new development makes a contribution:

2

What other funding sources or mechanisms could be used to support flood resilience? - Support natural flood management through payments to farmers, crofters and land managers (for example, Forestry Grant Scheme, the future agricultural support framework or Peatland ACTION payments):

3

What other funding sources or mechanisms could be used to support flood resilience? - Other (please specify in the text box below):

If you selected 'Other', please specify your answer:

## 20 What is your main concern about flooding?

Please limit your response to 1000 characters or less.:

There are continual changes to legislation and guidance making it challenging for flood teams to address delivery.

An increase in climate change issues negatively affects infrastructure as the design parameters for flood resilience are ever increasing, and older structures can become outdated and less effective against the risk of flooding. This has a knock on effect of requiring greater resources, time and funding.

There is generally confusion throughout the population as to who has responsibility for what, and also clarity on what is the aim of the government, Local Authorities and agencies.

Flood resilience is needed to be embedded long term into every aspect of feasibility, planning, construction, maintenance of infrastructure. How will this be formalised without the resources for research, training etc.

## 21 What one thing would do the most to improve Scotland's flood resilience?

Please limit your response to 1000 characters or less.:

Clarity on funding and timescales for all flooding projects to allow adequate time for design, consents and planned construction.  
Clarity and education / information available to the general public about what Flood Resilience / Protection are and what responsibilities of the public are.  
A large input from all sectors is required in order that Flood Resilience becomes a normal mode of thinking no matter who you are. This requires a fully funded Flood Resilience team that can work with both the general public and specialised sectors and other sections of the LA

## 22 Do you have any other comments?

Please limit your response to 1000 characters or less. :

A lot of prominence is put on Community Groups and there is a question as to how ready they are for this. AB has 23 inhabited islands, more than any other local authority in Scotland. The area includes Loch Awe the longest freshwater loch in Scotland and several long sea lochs, which bisect the landscape.

AB has a coastline with 3,723 Km. Many of the bridges, roads, ferries and buses routes are a physical restriction between towns, villages and Islas and Mainland.

LA are still best placed to validate the priority of schemes, based on data, in consultation with SEPA – and need to comply with LFP – Please also see Additional Statement on Flood Resilience Consultation

AB is subject to a significant amount of rainfall, and in October 2023 over a months' worth of rain fell over a 36 hour period starting 06/10/23 and running into 07/10/23. This was the wettest 2-day period on record for Scotland since 1891 (MET Office report). AB was the worst affected area.

## About you

What is your name?

Name:

Infrastructure Design

Are you responding as an individual or an organisation?

Organisation

What is your organisation?

Organisation:

Argyll and Bute Council

Further information about your organisation's response

Please add any additional context:

Argyll and Bute Council

Additional Statement on Flood Resilience Consultation

BACKGROUND

Scottish Government proposed a new strategy with a direction setting out information, actions and engagement to plan Flood Resilience, prioritise areas and mitigate flooding. The set direction indicates consultation with communities, farmers, members of public, consultants, Scottish Water, SEPA and other stakeholders. Scottish Government also indicated that Scottish Water policy is still being reviewed.

This document sets out Argyll and Bute Council's full response on the matter, which the online consultation submission was unable to capture.

RELEVANT, CURRENT LEGISLATION & STANDARDS

Whilst the Council needs to address and undertake studies and to carry out primarily reactive works, the Legislation continues to change. This overrides

the studies being undertaken before their recommendations can be implemented.

The following Acts are the main legislative drivers:

Flood Risk Management Act (Scotland) 2009

Councils and other Responsible Authorities have duties and powers under this Act, whereas Flood Resilience requires public behaviours to change. The Local Flood Risk Management Plans, led by SEPA and carried out every 6 years, became the principal driving force for Local Authorities' Flood Risk Management approach. These Plans were approved by Local Authorities' Elected Members and this allowed a commitment to be put in place to deliver on clear duties defined by the Plans.

In 2015, Argyll and Bute Council were able to develop a Flood Risk Management Policy, which was presented to and approved by Elected Members to define a clear policy on how the Council will deliver on the powers and duties defined in the Act and how available funding should be prioritised in accordance with the Local Flood Risk Management Plans.

In 2016, Argyll and Bute Council were able to present the Local Flood Risk Management Plans to Council Committee for approval by Elected Members. This further defined how the Council's Flood Risk Management obligations would be prioritised.

Climate Change (Scotland) Act 2009

2050 target and overall deliverability of the Act unclear. Councils spending a lot of money and works may need to be reviewed.

Equality Act 2010

Materials and measures which may be proposed for Flood Resilience may not be suitable for the most vulnerable people, including disabled and elderly people. For example, the deployment & removal of flood gates may be difficult or impossible, whereas flood doors may be a better solution.

PAS 2080:2023 Carbon Management in Infrastructure (Standard)

Although clear legislative direction is welcome, the considerable changes involved mean that studies undertaken in 2019 and ongoing will require revision.

Flood Resilience needs to align with Sustainability and Carbon Management.

United Nations Sustainable Development Goals may be useful to utilise on this.

Carbon footprint of Flood Resilience works and measures need to be considered in Flood Studies.

On all Flood Resilience matters, clear Legislation is required, not guidelines. Clear Legislation is required to ensure members of public, communities, landowners etc are suitably engaged and that behaviours are appropriately changed to consider Flood Resilience matters.

This should address:

- o Duties for Responsible Authorities (SEPA, Scottish Water, Local Authorities etc)
- o Duties for Guidance for the public (property owners, landowners, communities etc)

## FLOOD RESILIENCE RESPONSIBILITIES

### Property Owners

The Scottish Government makes it clear that individual property owners have primary responsibility for the prevention of flooding to their property and are;

- i. Responsible for being aware of potential flood risks to their property.
- ii. Responsible for maintaining private drainage within the curtilage of their property.
- iii. Responsible for taking action to prepare for flooding eg. Having a flood plan (SEPA Website Be flood prepared) and keeping sandbags to block doorways or air bricks during a flooding incident.
- iv. There is no statutory duty for the council to provide sandbags and property owners.
- v. Responsible for acquiring contents and building insurance with adequate flood cover.

### Landowners

- i. Riparian Ownership under Common Law makes clear that individuals with a watercourse within the boundary of their property, including piped watercourses, have what is termed 'riparian' responsibilities under common law. Riparian owners must allow the unrestricted flow of water through their property and must maintain and keep watercourses clear of obstructions that are liable to pose a risk of flooding.
- ii. Landowners are responsible for the provision and maintenance of private flood defence and drainage systems on their land.

### Scottish Environmental Protection Agency (SEPA)

- i. SEPA Provides a Floodline warning service for Scotland. People can sign up to this service and have free flood messages sent direct to your mobile phone or landline when problems are predicted in local areas. Messages are sent out three to six hours before potential flooding and it is considered that this service will allow crucial time to prepare people and their homes for flooding. <http://www.floodlinescotland.org.uk/> / <http://www.sepa.org.uk/environment/water/flooding/>

### Scottish Water

- i. Scottish Water is required to respond to flooding incidents caused from their sewerage system. <https://www.scottishwater.co.uk/en/Help-and-Resources/Contact-Us>
- ii. Scottish Water are still reviewing their policies.

### Local Authority Roads Operations Teams

- i. In accordance with Roads (Scotland) Act 1984, Local Authority Roads Operations teams carry out maintenance of public roads. This includes cleaning of road drainage systems and clearing roads of flooding. Road resurfacing, verge strengthening schemes are also carried out which should consider appropriate drainage outfalls.

## Local Authority Flood Risk Management Teams

ii. In accordance with Flood Risk Management (Scotland) Act 2009 (legislation.gov.uk), Local Authority Flood Risk Management Teams carry out four key responsibilities:

17. prepare maps of bodies of water etc.

18. assess bodies of water

34. prepare local flood risk management plans

59. carry out clearance and repair works

iii. Argyll and Bute Council's Flood Risk Management Team maintain a Flood Advice page on the Council's website to raise public awareness of flood risk:

<https://www.argyll-bute.gov.uk/environment/camera/flood-advice>

iv. The Flood Risk Management Team encourage the reporting of flood events (recent or historic) to [floodingenquiries@argyll-bute.gov.uk](mailto:floodingenquiries@argyll-bute.gov.uk). Reported flood events are recorded by the Flood Risk Management Team for future reference and for consideration in future Plans.

v. Section 34's Local Flood Risk Management Plans (LFRMP) are prepared by the lead Authority of each district. These are developed on a six yearly cycle and are typically used as the key driver for Flood Risk Management delivery by Local Authorities.

## EXAMPLES OF ONGOING, RELEVANT PROJECTS CARRIED OUT BY ARGYLL AND BUTE'S INFRASTRUCTURE DESIGN TEAM

Designs carried out by the Infrastructure Design team consider climate change (1:200yr+CC) and sustainability (design life and carbon footprint).

Climate change allowance currently considered is (1:200yr)+20% whereas peak river flow allowances are expected to increase by 59% by 2100 and peak rainfall intensity allowances in Argyll are expected to increase by 46% by 2080. Argyll's sea level is expected to rise by 0.86m between 2017 and 2100.

The following are examples of our ongoing projects:

### • Bridges

o Local Authorities do not have budgets to bring existing bridges to current flood management standards. Therefore, existing bridges which are not able to have additional dead loading added to increase road levels cannot be included in resurfacing schemes to mitigate flood risk. Bridges which are serving roads which are themselves in flood risk areas cannot be raised to an adequate level.

### • Surface Water Management Schemes:

o Whilst we are addressing surface water schemes under LFRMP, we are often faced with very steep, narrow roads with underlying and historic problems. The increased costs to deliver these are funded by the Council as no Cycle 2 funding has become available.

### • Marine Structures

o Pontoon systems anchored by chains to the seabed replaced with tubular piles extending 1.5m above the surrounding pier level. This is to account for both a 120-year design life including with regards to durability, and also a substantial increase in sea level during flood events.

o Piers and breakwaters are also designed for the 120year design life and designed in an adaptive manner where their heights can be increased in future to provide additional resilience. This also takes into consideration the change in sea categories.

### • Informal Flood Defences

o Infrastructure Design continue to design to bring flood resilience to communities within designs. In Tobermory the handrail was upgraded, which we used as an opportunity to increase the coastal wall height, add a flood barrier, flood gate and flap valves in order to reduce coastal flood risk to the community and within the designated budget of the project.

### • Car Parks

o Car park and leisure centre protected by flood defences including allowance for increase in sea levels. Retaining wall designed to keep future sea level out of the site and also allows height of the top of the wall to be increased if necessary. Non-return flap valves to allow drainage of flood waters, but not permit backflow of rising tides under normal operation. Rock armour revetment to dissipate wave energy and flood gate installed at the top of a slipway to maintain access under normal conditions but allow local team to close during flood event.

### • Culvert/Pipe upgrades

o Catchment and peak flow analysis are completed on a regular basis to ensure any new culverts or pipes installed within a project are up to flooding standards to ensure capacity during a 1 in 200 years + climate change flood event. When required a backflow analysis is also completed to demonstrate floodplains and to ensure works at a site will not cause flooding to areas further Upstream or Downstream.

### • Luing Community Coastal Change Adaptation Plan Case Study

o Assistance from the Council with their case study application, which was successful in securing additional funding for their Coastal Change Adaptation project which considered Flood Resilience measures.

## FUNDING

• Scottish Government have indicated very tight budgets.

• Given the above:

o changes to Legislation and Standards,

o lack of public engagement on Flood Resilience Responsibilities and

o examples of ongoing schemes (several which address flood resilience without any actual flood resilience funding);

it would be beneficial to have clarity from the Scottish Government on how the following should be prioritised and progressed to ensure that best value is secured for any funding which is available:

o Flood Studies – several of these were carried out and submitted in 2019, but have not yet had any funding confirmed by the Scottish Government to allow their recommendations to be progressed,

o Flood Resilience / Flood Management Works – given the number of actions required by the Local Flood Risk Management Plans, how should these be prioritised in Council budgets and programmes to allow progress to be made in delivery with any funding which is available?

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:



Publish response with name

Do you consent to Scottish Government contacting you again in relation to this consultation exercise?

Yes

What is your email address?

Email:

floodingenquires@argyll-bute.gov.uk

I confirm that I have read the privacy policy and consent to the data I provide being used as set out in the policy.

I consent

## Evaluation

Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)

Matrix 1 - How satisfied were you with this consultation?:

Slightly satisfied

Please enter comments here.:

Matrix 1 - How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?:

Slightly satisfied

Please enter comments here.: