#### ARGYLL AND BUTE COUNCIL

## ENVIRONMENT, DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

# DEVELOPMENT AND INFRASTRUCTURE SERVICES

14 AUGUST 2014

# FLOOD RISK MANAGEMENT – STRATEGIC APPRAISAL OF MEASURES: INITIAL OBJECTIVES

#### 1.0 EXECUTIVE SUMMARY

The Flood Risk Management (Scotland) Act 2009 placed duties on SEPA, Scottish Water, the National Park authorities, Forestry Commission and Local Authorities as Responsible Authorities to reduce flood risk across the country.

A Flood Risk Management Strategy and Local Flood Risk Management Plan are to be produced for each Local Plan District. Argyll & Bute Council are members of two Local Plan Districts:- Clyde & Loch Lomond with Glasgow City Council as Lead Local Authority, and Highland/Argyll with Highland Council as Lead Local Authority.

Potentially vulnerable areas were identified by SEPA and the known hazards and predicted flood risks in each area have been documented. Initial Objectives have also been developed which identify the type of flood risk and broad geographic area which should be considered when determining the actions that could be undertaken to meet the Objective.

A public consultation that will inform the Flood Risk Management Strategy, is due to take place between December 2014 and June 2015. This will offer the chance for stakeholder organisations and the public to comment on the information and ultimately shape the actions that will be taken forward to manage flood risk.

The purpose of the report is to update members on the process and to seek their endorsement of the initial objectives.

#### RECOMMENDATION

It is recommended that Members endorse the ongoing work in the production of local Flood Risk Management Plans.

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#### 2.0 INTRODUCTION

- 2.1 The paper sets out the arrangements of how flood risk is being managed within Scotland through SEPA and the other Responsible Authorities. It details how the existing flood hazards and risks have been identified and lists Initial Objectives in the appendices that will inform actions necessary to manage flood risk. These will be part of a public consultation starting in December 2014. Together with the feedback, these will lead to the formation of Flood Risk Management Strategy published by SEPA and Local Flood Risk Management Plans by the Lead Local Authority in each Local Plan District throughout Scotland.
- 2.2 The purpose of the report is to update members on the process and to seek their endorsement of the initial objectives.

### 3.0 RECOMMENDATIONS

3.1 It is recommended that Members endorse the ongoing work in the production of local Flood Risk Management Plans.

### 4.0 DETAILS

- 4.1 The Flood Risk Management (Scotland) Act 2009 placed duties on SEPA, Scottish Water, the National Park authorities, Forestry Commission and Local Authorities as Responsible Authorities to reduce flood risk across the country. Scotland has been split into 14 Local Plan Districts, based on catchment boundaries, for the purpose of managing flood risk.
- 4.2 Argyll & Bute Council are members of two Local Plan Districts:- Clyde & Loch Lomond with Glasgow City Council as Lead Local Authority, and Highland/Argyll with Highland Council as Lead Local Authority. Argyll & Bute Council is represented at each Local Plan District by an Elected Member and officers.
- 4.3 A Flood Risk Management Strategy and Local Flood Risk Management Plan are to be produced for each Local Plan District. The Strategy will cover three 6 year cycles of the Local Flood Risk Management Plan. The first cycle starts in 2016.

The Lead Local Authority for each Local Plan District has to co-ordinate and support the production of the Local Flood Risk Management Plan.

### 4.4 Mapping, Objectives and Measures

SEPA carried out and completed the National Flood Risk Assessment in 2011 and this identified areas that were potentially vulnerable to flooding – Potentially Vulnerable Areas (PVAs). Within Argyll & Bute there are 16 PVAs (Clyde & Loch Lomond has 4 and Highland/Argyll 12). A Characterisation report for each PVA was produced by SEPA documenting the known hazards and predicted flood risks in each area. Each local authority made comment on the Characterisation report based on its local knowledge. A similar process was undertaken for drafting the Initial Objectives which identify the type of flood risk and broad geographic area which should be considered when determining the actions that could be undertaken to meet the Objective.

- 4.5 A public consultation that will inform the Flood Risk Management Strategy, is due to take place between December 2014 and June 2015. This will offer the chance for stakeholder organisations and the public to comment on the information and ultimately shape the actions that will be taken forward to manage flood risk. The public consultation will include:-
  - 4.5.1 Characterisation reports which define the existing level of flood risk under the current regime of flood risk management. The characterisation reports define the flood risk problem in Potentially Vulnerable Areas and provide the evidence base against which future actions to reduce risk can be assessed and compared.
  - 4.5.2 Setting and agreeing objectives which will help develop a common vision for flood risk management. Objectives are agreed in two stages. Initial objectives for consultation are based on SEPA's flood maps and the detailed knowledge and information provided by local authorities, both of which are summarised in the characterisation reports. These objectives are quite broad in nature with their purpose being to help identify the appropriate actions to manage flooding. After consultation, with the benefit of more detailed information on what is practical and feasible in terms of technical solutions and resources, these initial objectives will be refined to provide specific final objectives to manage flooding. The Initial Objectives listed in Appendices 1 and 2 of this report have been agreed between SEPA and the Council at officer level with those in Appendix 2 for the Clyde and Loch Lomond LPD have also been agreed at the LPD Elected Members' meeting on 10 June 2014 with the proviso that they would still be subject to consideration by the Environment Development & Infrastructure Committee.
  - 4.5.3 Identifying actions Once objectives to manage risk in the Potentially Vulnerable Areas have been agreed, a short list of possible actions needs to be identified. Starting from a long-list of possible actions that includes the full range of structural and non-structural interventions, a screening exercise will refine the list to ensure the most sustainable combination of actions is selected to manage the identified flood risks.

### 5.0 CONCLUSION

5.1 The work undertaken by SEPA, the local authorities and the other Responsible Authorities has been a structured approach to identifying flood hazards and risks in Scotland. The Characterisation Reports and Initial Objectives identify these in more detail with the Initial Objectives providing the broad detail of the type and geographic areas of flood risk to be considered. These will be the main focus of a public consultation that will provide further information to allow SEPA to produce a Flood Risk Management Strategy for each Local Plan District. The Lead Local Authority for the two Local Plan Districts that the Council is a member of will produce a Local Flood Risk Management Plan that will detail the actions necessary to deliver the strategy. The Initial Objectives for each of the Potentially Vulnerable Areas within Argyll and Bute are listed in Appendices 1 and 2.

### 6.0 IMPLICATIONS

6.1	Policy	The Council has a flooding policy in draft stage at present and there are no conflicts between it and the contents of this paper,
6.2	Financial	Revenue budget has been set aside for dealing with the requirements of the Flood Risk Act process.
6.3	Legal	Complies with the 2009 Flood Risk Act
6.4	HR	None.
6.5	Equalities	Na
6.6	Risk	The Council is designated as a Responsible Authority within the Flood Act and the process noted in the paper serves to reduce risk to the Council.
6.7	Customer Services	The Consultation will be led by SEPA and the Lead Local Authorities and the level of the Council's involvement is expected to be determined toward the end of 2014.

Executive Director of Development and Infrastructure Policy Lead Cllr Ellen Morton
July 2014

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### **APPENDICES**

Appendix 1 - Potentially Vulnerable Areas with Argyll and Bute within the Highland and Argyll Local Plan District.

Appendix 2 - Clyde and Loch Lomond LPD – PVA Objectives

Appendix 1 Potentially Vulnerable Areas and Initial Objectives for Argyll and Bute within the Highland and Argyll Local Plan District.

PVA ID	LA	Objective Type	Objective	Indicator	
01/29	Argyll & Bute	Reduce	Reduce economic damages to residential and non-residential properties at risk of coastal flooding	From an estimated total Annual Average Damages for residential properties of £14,000 From an estimated total Annual Average Damages for non-residential properties of £8,000	
		Reduce	Reduce disruption to transport at high risk from coastal flooding	13 road locations	
01/30	Argyll & Bute	Reduce	Reduce the number of community facilities at risk of coastal flooding	28 road locations	
01/30		Reduce	Reduce disruption to transport at high risk from coastal and river flooding	28 road locations	
01/31	Argyll & Bute	Reduce	Reduce economic damages to residential and non-residential properties at risk of coastal and river flooding	From an estimated total Annual Average Damages for residential properties of £276,000 From an estimated total Annual Average Damages for non-residential properties of £1.2 million	
		Reduce	Reduce the number of people at risk of coastal and river flooding	From an estimate of 367 people	
		Reduce	Reduce the number of utilities at risk of coastal and river flooding	8 electricity sub-stations 1 telecommunications site	
		Reduce	Reduce disruption to transport at high risk from coastal and river flooding	11 road locations	
		Reduce		Reduce economic damages from surface water flooding.	1 rail location From an estimated total Annual Average Damages of £104,000
		Reduce	Reduce the number of residential properties at risk of surface water flooding.	From an estimate of 17 residential properties	

01/32	Argyll & Bute	Reduce	Reduce disruption to transport at high risk from coastal and river flooding	6 road locations	
	Argyll & Bute	Reduce	Reduce economic damages to residential properties at risk of river flooding.	From an estimated total Annual Average Damages for residential properties of £43,000	
		Reduce	Reduce economic damages to non-residential properties at risk of coastal flooding.	From an estimated total Annual Average Damages for residential properties of £49,000	
01/33		Reduce		From an estimate of 88 people	
		Reduce	Reduce the number of utilities at risk of coastal and river flooding	2 electricity sub-stations	
		Reduce	Reduce disruption to transport at high risk from coastal	6 road locations	
		Reduce	and river flooding.	1 rail location	
		Reduce	Reduce economic damages to non-residential properties at risk of river flooding.	From an estimated total Annual Average Damages for residential properties of £42,000	
		Reduce	Reduce the number of people at low risk of river flooding	From an estimate of 55 people	
01/34	Argyll & Bute	Reduce	Reduce the number of community facilities at risk of river flooding	1 school	
		Reduce	Reduce the number of utilities at risk of river flooding	1 electricity generating site	
				1 mineral/fuel extraction site??	
		Reduce	Reduce disruption to transport at high risk from river	25 road locations	
		Reduce	flooding.	7 rail locations	
01/35	Argyll & Bute	Reduce	Reduce disruption to transport at high risk from coastal flooding.	9 road locations	
01/36	Argyll & Bute	Reduce	Reduce disruption to transport at high risk from river flooding.	14 road locations	
	Argyll & Bute	Reduce	Reduce economic damages to residential and non-residential properties at risk of coastal flooding.	From an estimated total Annual Average Damages for residential properties of £106,000	
01/37				From an estimated total Annual Average Damages for non-residential properties of £159,000	
		Reduce	Reduce the number of people at risk of coastal flooding	From an estimate of 88 people	
		Reduce	Reduce the number of utilities at risk of coastal flooding	1 electricity sub-station	
		Reduce	Reduce disruption to transport at high risk from coastal flooding.	8 road locations	
01/38	Argyll &	Reduce	Reduce the number of people at low risk of river flooding	From an estimate of 46 people	

		Reduce	Reduce the number of community facilities at low risk of river flooding	1 school
		Reduce	Reduce disruption to transport at high risk from river flooding.	9 road locations
01/39	Argyll & Bute	Reduce	Reduce economic damages to residential and non- residential properties at risk of coastal and river flooding	From an estimated total Annual Average Damages for residential properties of £41,000 From an estimated total Annual Average Damages for non-residential properties of £23,000
		Reduce	Reduce the number of people at risk of coastal flooding	From an estimate of 6 people
	Dute	Reduce	Reduce the number of utilities at risk of river flooding	1 electricity sub-station
		Reduce	Reduce disruption to transport at high risk from coastal flooding.  Note: coastal damages likely to be underestimated therefore have been included in the objectives.	9 road locations
	Argyll & Bute	Reduce	Reduce economic damages to residential and non- residential properties at risk of coastal and river flooding	From an estimated total Annual Average Damages for residential properties of £208,000  From an estimated total Annual Average Damages for non-residential properties of £201,000
		Reduce	Reduce the number of people at risk of coastal and river flooding	From an estimate of 774 people
01/40		Reduce	Reduce the number of community facilities at risk of river	Fire station
01/40			flooding	Police Station
		Reduce	Reduce the number of utilities at risk of river flooding	3 electricity sub-stations
		Reduce	Reduce disruption to transport at high risk from river flooding	8 road locations
		Reduce	Reduce economic damages from surface water flooding.	From an estimated total Annual Average Damages of £60,000
		Reduce	Reduce the number of residential properties at risk of surface water flooding.	From an estimate of 8 residential properties

Appendix 2 Clyde and Loch Lomond Local Plan District Initial Objectives

Ref	PVA ID	Local Authority	Objective Type	Objective Text	Indicator
11:01	11/01	Argyll and Bute	Reduce	Reduce impact of river / surface water flooding to residential properties and community facilities in Cardross	Economic damages
11:02	11/02	Argyll and Bute	Reduce	Reduce impact of coastal flooding to residential properties and non residential properties in Garelochhead	Number of properties at risk
11:03	11/02	Argyll and Bute	Reduce	Reduce impact of coastal flooding to residential properties and non residential properties in Helensburgh	Economic damages
11:04	11/06	Argyll and Bute	Reduce	Reduce impact of combined flooding to residential properties and non residential properties in Rothesay	Number of properties at risk
11:05	11/07	Argyll and Bute	Accept	Accept that current and future significant flood risks in the Crochan Road and Kilbride Road areas of Dunoon are being managed appropriately	Not applicable
11:06	11/07	Argyll and Bute	Reduce	Reduce impact of Milton Burn flooding to residential properties in Dunoon	Number of people at risk
11:07	11/01	Argyll and Bute	Reduce	Reduce disruption to the A82 from river flooding from Tarbet to Ardlui	Disruption to transport network
11:80	11/01	Argyll and Bute / Stirling / West Dunbartonshire	Avoid	Avoid increasing flood risk within the PVA	Ongoing assessment
11:81	11/02	Argyll and Bute	Avoid	Avoid increasing flood risk within the PVA	Ongoing assessment
11:85	11/06	Argyll and Bute	Avoid	Avoid increasing flood risk within the PVA	Ongoing assessment
11:86	11/07	Argyll and Bute	Avoid	Avoid increasing flood risk within the PVA	Ongoing assessment

Typical view of a PVA that would be incorporated in paper (There would be 16 maps for the 16 PVAs at 2 per page adding another 8 pages to the report)

PVA ID 01/38 Lochgilphead Potentially Vulnerable Area

