

**TRANSPORTATION AND INFRASTRUCTURE COMMITTEE: 10 NOVEMBER 2009****FLOOD PREVENTION AND LAND DRAINAGE (SCOTLAND) ACT 1997****7<sup>TH</sup> BIENNIAL REPORT****REPORT BY DIRECTOR OF DEVELOPMENT AND ENVIRONMENT SERVICES****1. PURPOSE OF REPORT**

- 1.1 To present the 7<sup>th</sup> biennial report as required in terms of the Flood Prevention (Scotland) Act 1961 (as amended by the Flood Prevention and Land Drainage (Scotland) Act 1997).

**2. RECOMMENDATIONS**

The Committee is invited to note:-

- 2.1 that The Flood Prevention and Land Drainage (Scotland) Act 1997 amended the Flood Prevention (Scotland) Act 1961 by placing the following duties on the Council:-

- 2.1.1 to carry out an assessment of watercourses;  
2.1.2 to carry out maintenance of watercourses; and  
2.1.3 to publish biennial reports;

- 2.2 that measures taken by the Council to prevent or mitigate flooding of non-agricultural land comprise:-

- 2.2.1 the identification, inspection and monitoring of all watercourses;  
2.2.2 the completion of any necessary maintenance works; and  
2.2.3 the provision, where necessary, of engineering reports detailing proposals to prevent flooding;

- 2.3 that, within the Winter Maintenance Plan, an integrated service is provided to deal with extraordinary works associated with flooding caused by severe weather; and

- 2.4 that the 7<sup>th</sup> biennial report on the occurrence of flooding of non-agricultural land for the period 1 June 2007 to 31 May 2009 included 47 reported incidences, a number of which did not conform to the definition of flooding as defined by guidance notes published by The Society for Chief Officers of Transport, Scotland.

**3. POLICY ASPECTS**

- 3.1 In terms of 'The Council Plan', the Council's Corporate Strategic Plan for 2008-13, the actions noted in this report conforms to the Council values of 'promoting sustainability' by making sure economic, environmental and social factors are balanced and of 'working together' to overcome issues more effectively through partnership working.

- 3.2 The Council has also identified sustainable communities as one of its key priorities and the actions noted in this report work towards tackling environmental concerns by reducing flooding.

#### **4. INTRODUCTION**

- 4.1 The Flood Prevention and Land Drainage (Scotland) Act 1997 came into force on 26 May 1997 and amended the Flood Prevention (Scotland) Act 1961 by placing statutory duties on local authorities to assess and maintain watercourses within their area, and to publish reports at least every two years specifying the measures which they consider that they require to take to prevent or mitigate the flooding of land in their area.
- 4.2 The Flood Prevention (Scotland) Act 1961 (as amended) (“the Act”) will be repealed by The Flood Risk Management (Scotland) Act 2009 which was enacted on 16 June 2009. The Flood Risk Management (Scotland) Act 2009 will be commenced in phases. On 16 June 2009, only a small number of mainly interpretive clauses came into force. In July 2009 the Scottish Government published guidance stating that it was now in the process of setting in place a workable timetable for commencing different parts of the new Act, but a timetable has yet to be published.
- 4.3 On the commencement of the Flood Risk Management (Scotland) Act 2009, the requirement for biennial reporting will be replaced by the preparation of local flood risk management plans and reports on the implementation of those plans. However there remains a requirement for Local Authorities to prepare Biennial reports for the period 1 June 2007 to 31 May 2009. This report constitutes the 7<sup>th</sup> Biennial Report published by Orkney Islands Council.

#### **5. BACKGROUND**

- 5.1 The main sections of the Act can be summarised as follows:-
- 5.1.1 The local authority is required to assess all watercourses from time to time to ascertain whether or not they are likely to cause flooding of non-agricultural land;
  - 5.1.2 The local authority is required to carry out works to reduce the likelihood of flooding of non-agricultural land;
  - 5.1.3 The Act does not place any duty to undertake capital works;
  - 5.1.4 Local authorities are required to liaise with adjacent authorities; and
  - 5.1.5 Local authorities are required to prepare and publish biennial reports.
- 5.2 The Act does not apply where failure to maintain would result only in flooding of land in the same ownership as the watercourse requiring maintenance.
- 5.3 The Act requires the Council to assess watercourses from time to time to ascertain if they are in a condition likely to cause flooding of non-agricultural land.
- 5.4 Identified watercourses within Orkney are inspected annually for potential future problems which may cause flooding. This includes checking inlet pipes and grills

for debris, checking overgrown vegetation and examining the geometry of the watercourse for potential blockages.

- 5.5 Using maps detailing the extent of all known watercourses, and which identify areas with known flooding problems, an assessment of flows from all new housing developments are evaluated and concerns raised where appropriate.
- 5.6 The Act also gives the Council powers to cleanse, repair or otherwise maintain in a due state of efficiency any watercourse, barrier or ancillary apparatus for the purpose of preventing or mitigating the flooding of non-agricultural land in their area.

## **6. 7<sup>TH</sup> BIENNIAL REPORT**

- 6.1 This biennial report for the period 1 June 2007 to 31 May 2009 sets out that the following measures are required to prevent or mitigate the flooding of non-agricultural land in Orkney:-
  - 6.1.1 Identify, monitor and inspect all watercourses and carry out any necessary maintenance works. Where necessary, provide engineering reports on proposals to prevent any flooding.
  - 6.1.2 Within the Winter Maintenance Plan, an integrated service is provided to deal with the extraordinary works associated with flooding caused by severe weather.
- 6.2 This report also sets out the measures taken by the Council to prevent or mitigate such flooding since the date of publication of its previous report. Those measures can be summarised as follows:-
  - 6.2.1 A960, East of Airport, St Ola – Constructed new culvert across road adjacent to Easthouse.
  - 6.2.2 Cromarty Square, St Margaret's Hope – Replaced existing culvert and inlet grating and extended the culvert as part of Improved Access to St Margaret's Hope capital road project.
  - 6.2.3 A965 Maitland Place, Finstown – Removed outfall pipes, constructed access manhole and replaced outfall pipes by extending culvert.
  - 6.2.4 Papdale East, Kirkwall – Improved inlets and replaced damaged culvert.
  - 6.2.5 Willow Road, Kirkwall – Constructed an upgraded headwall and screens for the Willowburn, which takes the flow of water from Papdale East. Formed an all weather access to aid maintenance of gratings.
  - 6.2.6 A965, Saverock Junction, Kirkwall – Replaced discharge pipes to outfall with larger capacity pipe.
  - 6.2.7 A965 Grainbank, Kirkwall – Increased capacity of pipe work adjacent to Golf Course and diverted discharge into alternative surface water system with greater capacity.
  - 6.2.8 A961 Roadside, South Ronaldsay – Replaced existing system with larger capacity pipes.
  - 6.2.9 Millburn Brig, Hoy – Constructed new bridge with environmental improvements as capital roads project.
  - 6.2.10 B9056, Skail, West Mainland – Landowner cleared outfall and carried out maintenance.

- 6.2.11 Old Scapa Road, Kirkwall – Developer re-routed culvert adjacent to Corse Loan.
- 6.2.12 Cleat, Sanday – Replaced shore and constructed gabion defences to prevent flooding of public road.
- 6.2.13 Cairston Road, Stromness – Designed upgrade to discharge from Market Green and Cairston Road area for construction during summer 2009.
- 6.2.14 Undertook extensive survey of surface water systems in Kirkwall leading to the completion of a detailed feasibility study of options with regard to achieving a significant reduction to the probability of flooding in the low lying areas of Kirkwall.

- 6.3 During the period 1 June 2007 to 31 May 2009, 28 incidents were reported. In accordance with The Society for Chief Officers of Transport, Scotland (SCOTS) published notes for guidance, a number of these incidents did not conform to the definition of flooding. For example, a number of reports of flooding were related to high surge tides, burst water mains, minor blockages associated with road gullies or with manholes surcharging following periods of torrential rain.
- 6.4 The Council has a statutory duty to report the remaining 19 which do conform and these are attached as Appendix 2 to this report. Of the 19 reported incidents, 5 relate to 6 August 2007, 10 relate to the period 15 to 21 September 2007 and 4 relate to the period 9 to 25 January 2008.

## **7. FINANCIAL IMPLICATIONS**

- 7.1 Costs associated with maintenance of water courses are contained within the roads revenue budget. The revenue budget however does not make any specific provision for the prevention of flooding.

## **8. LEGAL ASPECTS**

- 8.1 Under the Act, the Council has various duties with regard to assessing and maintaining watercourses with a view to preventing or mitigating the flooding of non-agricultural land in their area.
- 8.2 Section 6A of the Act imposes a duty on the Council to publish a report specifying the measures which they consider that they require to take to prevent or mitigate the flooding of land in their area. These reports must be published at least every two years.
- 8.3 Biennial reports will no longer be required when the Flood Risk Management (Scotland) Act 2009 is implemented.
- 8.4 The Scottish Government's intention is to prepare two commencement orders for the 2009 Act. The first commencement order will come into force in time to ensure that the EU Floods Directive is transposed into national law by the deadline of 26 November 2009. The second commencement order, which will be accompanied by transitional arrangements dealing with the transfer from the 1961 Act to the new statutory process, is likely to come into force in the second half of 2010.

**9. CONTACT OFFICERS**

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**10. APPENDICES**

10.1 Appendix 1 – Annual Inspection Schedule for Culverts - 2009/10

10.2 Appendix 2 – Reported Flooding Incidents from 1 June 2007 to 31 May 2009

**Annual Inspection Schedule for Culverts – 2009/10**

Schedule of culverts to be checked and cleared of debris once a week in summer, twice a week during winter (October to April).

**Kirkwall**

Otterswick, Papdale East.	1 No.
Willow Road/Mill Street	3 No.
Muddisdale Road	2 No.
Weyland Bay	1 No.
New Scapa Road/Holm Branch	3 No.
Burgh Road (Peerie Sea)	1 No.
The Crafty	1 No.
	<u>12 No.</u>

**Stromness**

Garson Road (School)	1 No.
Pumphouse	1 No.
Cairston Road	1 No.
Hillside Road	1 No.
Faravel	1 No.
Innertown Road	1 No.
Mayburn Court	1 No.
Marwick Playing Field	2 No.
	<u>9 No.</u>

**St Margaret's Hope**

Cromarty Square	1 No.
Front Road	1 No.
	<u>2 No.</u>

**Flood Prevention and Land Drainage (Scotland) Act 1997:  
7th Biennial Report - Reported Flooding Incidents from 1 June 2007 to 31 May 2009**

**Appendix 2**

<b>Date</b>	<b>Location</b>	<b>Description</b>	<b>Comments</b>	<b>Action</b>
06/08/2007	Millbay Road, Stronsay	Road Flooded	Water course unable to cope with run off from surrounding land.	Cleaned outlet on shore.
06/08/2007	A961 Berriedale, South Ronaldsay	Road Flooded	Excess surface water run off.	Signed and lit. Check and clear offlets.
06/08/2007	Cromarty Square, South Ronaldsay	Road Flooded	Burn over spilled and flooded square area.	Delivered sandbags to properties and cleared debris from grill at inlet to culvert.
06/08/2007	A960 Airport Area, St Ola	Road Flooded	Water course unable to cope with run off from surrounding land.	Signed and lit. Check and clear offlets.
06/08/2007	A965 Saverock, St Ola	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
15/09/2007	A960 Wideford Brae, St Ola	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
15/09/2007	A961 Cannigal Road Area	Road Flooded	Excess surface water run off.	Signed and lit. Check and clear offlets.
15/09/2007	A966 Skiddy Brae, Rendall	Road Flooded	Excess surface water run off.	Signed and lit. Check and clear offlets.
15/09/2007	Caldene, Old Finstown Road	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
17/09/2007	A960 Quoyburray	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Check drainage system and clear any blockages.
17/09/2007	A965 Saverock, St Ola	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
17/09/2007	A965 Rennibister Area, Firth	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
17/09/2007	A965 Stenness	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
21/09/2007	A966 Evie	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
21/09/2007	A967 Birsay Hall Area	Road Flooded	Excess surface water run off.	Signed and lit. Clear offlets.

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<b>Date</b>	<b>Location</b>	<b>Description</b>	<b>Comments</b>	<b>Action</b>
09/01/2008	A961 Berriedale, South Ronaldsay	Road Flooded	Excess surface water run off.	Signed and lit. Check and clear offlets.
18/01/2008	B9066, Westary	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit.
25/01/2008	A965 Quanterness, St Ola	Road Flooded	Excess surface water off fields, drainage system unable to cope with volume of water.	Signed and lit. Check and clear offlets.
25/01/2008	A960 Airport Area, St Ola	Road Flooded	Water course unable to cope with run off from surrounding land.	Signed and lit. Check and clear offlets.