

TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
28 MARCH 2006

FLOOD PREVENTION AND LAND DRAINAGE (SCOTLAND) ACT 1997
BIENNIAL REPORT

REPORT BY DIRECTOR OF TECHNICAL SERVICES

1.0 PURPOSE OF REPORT

1.1 To present the biennial report as required in terms of the Flood Prevention and Land Drainage (Scotland) Act 1997.

2.0 CORPORATE OBJECTIVE

2.1 Community Safety: 4.2 - Flood Prevention and Land Drainage; Biennial Report.

3.0 INTRODUCTION

3.1 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 maintain watercourses within their area.

3.2 The main sections of the Flood Prevention and Land Drainage (Scotland) Act 1997 can be summarised as follows:

- Requires the local authority to assess flood risk from watercourses.
- Requires the local authority to assess all watercourses from time to time to ascertain whether or not they are likely to cause flooding of non-agricultural land.
- Requires the local authority to carry out works to reduce the likelihood of flooding of non-agricultural land.
- The Act does not place any duty to undertake capital works.
- Requires local authorities to liaise with adjacent authorities.
- Requires local authorities to prepare and publish biennial reports.

3.3 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.

4.0 PREVIOUS REPORTS

4.1 The Council's Initial Report was published in January 1998 and this was followed with reports published in March 2000, November 2001 and October 2003. This report covers the period November 2003 to October 2005.

5.0 ASSESSMENTS OF WATERCOURSES

- 5.1 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.
- 5.2 Identified watercourses 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.
- 5.3 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.

6.0 MAINTENANCE OF WATERCOURSES

- 6.1 This section of the Act provides the Council with permissive powers to cleanse, repair or otherwise maintain in a due state of efficiency any watercourse, barrier or ancillary apparatus where there is a likelihood that flooding of non-agricultural land could occur.
- 6.2 During the summer watercourses are inspected once a week and during the winter they are inspected twice a week. These inspections involve checking the inlets to culverts and the removal of debris from the screens (see Appendix A attached). This regular maintenance is particularly important where watercourses lead directly to the sea.

7.0 BIENNIAL REPORT

- 7.1 The measures the Council consider are required to prevent or mitigate the flooding of non-agricultural land in Orkney are as follows:-
- Identify, monitor and inspect all watercourses and carry out any necessary maintenance works. Where necessary provide engineering reports on proposals to prevent any flooding.
 - Within the Winter Maintenance Plan, an integrated service is provided to deal with the extraordinary works associated with flooding caused by severe weather.
- 7.2 Measures taken by the Council to prevent or mitigate such flooding since the date of publication of its previous report are summarised as follows:-
- No.2 Victoria Street, Stromness – Installed new culvert and diverted surface water outfall to sea.
 - Kirkwall Development Impact Assessment - A Kirkwall Development Impact Assessment has been carried out by Scottish Water to identify problems for, and restrictions on, development within Kirkwall due to drainage infrastructure. The study will also identify potential solutions to these problems. Final proposals are awaited following which the Council will consider the impact on the Peedie Sea and flood prevention measures associated with discharges into it.

7.3. During the period November 2003 to October 2005, 15 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.

7.4 The Council has a statutory duty to report the following:-

Location	Frequency	Brief Description	Subsequent Action
Mayburn Court, Hillside Road and Grieveship, Stromness	Occasional	Heavy rain and debris blocked inlet to culverts	Clear debris from culvert screens
Cromarty Square, St Margaret's Hope	Occasional	High tide, heavy rain and debris blocked inlet to culvert	Clear debris from culvert screens
Weyland Bay	Occasional	Heavy rain and debris blocked inlet to culvert	Clear debris from culvert screens
Pierowall, Westray	Occasional	High tide and seaweed blocks culvert	Clear debris from beach outlet

7.5 Although there is no requirement to include flooding relating to high tidal surges within this report it should be noted that extraordinary tidal and storm conditions resulted in extensive flooding in many areas of Orkney throughout the period 11 – 13 January 2005. The Council's response to these severe weather conditions was reported to the Policy and Resources Committee on 12 April 2005.

8.0 FINANCIAL IMPLICATIONS

8.1 Costs associated with maintenance of water courses are contained within the roads revenue budget.

9.0 LEGAL IMPLICATIONS

9.1 The Flood Prevention and Land Drainage (Scotland) Act 1997 places duties on the Council with a view to preventing the flooding of non-agricultural land.

10.0 POLICY ASPECTS

10.1 The Council's policy on flood prevention is set out in the initial report submitted to the Roads and Environmental Services Committee on 27 January 1998. The Stage 1 and Stage 2 proposals set out the Council's policy on 'Measures to Prevent or Mitigate Flooding of Non-Agricultural Land in Orkney'.

11.0 CONCLUSIONS

11.1 The Flood Prevention and Land Drainage (Scotland) Act 1997 places a duty on the Council to carry out an assessment of watercourses, to carry out maintenance of watercourses and to publish biennial reports.

11.2 This report constitutes the biennial report on the occurrence of flooding for the period November 2003 to October 2005.

11.3 The report details the measures taken to prevent or mitigate flooding of non-agricultural land.

12.0 **RECOMMENDATIONS**

It is recommended to note:-

- 12.1 that The Flood Prevention and Land Drainage (Scotland) Act 1997 places the undernoted duties on the Council:-
 - 12.1.1 to carry out an assessment of watercourses;
 - 12.1.2 to carry out maintenance of watercourses; and
 - 12.1.3 to publish biennial reports;
- 12.2 that measures taken by the Council to prevent or mitigate flooding of non-agricultural land comprise:-
 - 12.2.1 the identification, inspection and monitoring of all watercourses;
 - 12.2.2 the completion of any necessary maintenance works; and
 - 12.2.3 the provision, where necessary, of engineering reports detailing proposals to prevent flooding;
- 12.3 that, within the Winter Maintenance Plan, an integrated service is provided to deal with extraordinary works associated with flooding caused by severe weather; and
- 12.4 that the biennial report on the occurrence of flooding of non-agricultural land for the period November 2003 to October 2005 included 15 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.

13.0 **CONTACT OFFICER**

- 13.1 David Rendall, Head of Roads, extension 2309.

Director
DR/KG
1 March 2006

Appendix A

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>