

## **ORKNEY ISLANDS COUNCIL**

### **Report by the Director of Technical Services to the Roads and Environmental Services Committee Meeting on the 6 November 2001**

#### **Flood Prevention**

##### **1 Purpose of Report**

To present the biennial report as required under the Flood Prevention and Land Drainage (Scotland) Act 1997.

##### **2 Introduction**

The main provisions of the Flood Prevention and Land Drainage (Scotland) Act 1997 came into operation on the 26 May 1997. Amongst other things the Act amended the Flood Prevention (Scotland) Act 1961 and placed new duties on all local authorities in Scotland. The new duties are as follows:-

- (i) to carry out an assessment of watercourses;
- (ii) to carry out maintenance of water courses; and
- (iii) to publish biennial reports.

These requirements ensure that the general public has access to the records of the local authority in relation to the Act.

##### **3 Previous Reports**

The Council's Initial Report was published in January 1998 and a biennial report covering the period from 1997 to 1999 was published in March 2000. This report covers the period October 1999 to October 2001.

##### **4 Assessments of Watercourses**

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.

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 burn for potential blockages.

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 Maintenance of Watercourses**

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.

During the summer/...

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 (see Appendix A attached). This regular maintenance is particularly important where watercourses lead directly to the sea.

## **6 Biennial Report**

- (i) The measures the Council consider are required to prevent or mitigate the flooding of non-agricultural land in Orkney

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.

- (ii) The measures the Council has taken since the date of publication of its previous report to prevent or mitigate such flooding

Lynnburn, Kirkwall - A contract has been awarded to pipe the existing watercourse, remove potential blockage points and remove the need for regular maintenance.

Pickaquooy Road, Kirkwall (Phase 2) - A positive drainage system is due to be undertaken along the road. This will add to the potential to cope with any future flooding in the area.

Victoria Street, Stromness – There have been no incidents of flooding since last report. Investigations are ongoing to prevent flooding to private properties.

Peedie Sea, Kirkwall – A report on flood prevention measures associated with discharges into and from the Peedie Sea has been commissioned.

- (iii) All occurrences of such flooding since October 1999

During the period October 1999 to October 2001, 7 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 related to minor blockages associated with road gullies or with residents concerned about potential flooding.

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

| Location                              | Frequency       | Brief Description   | Subsequent Action            |
|---------------------------------------|-----------------|---|------------------------------|
| Main Street & Junction Road, Kirkwall | Occasional      | High tide and heavy rain occurs                           | Warning sign until tide ebbs |
| Cromarty Square, St Margaret's Hope   | Very occasional | High tide, heavy rain and debris blocked inlet to culvert | Clear debris from culvert    |
| Pierowall, Westray                    | Occasional      | High tide and seaweed blocks culvert                      | Clear debris                 |

## **8 Financial Implications/...**

## **8      Financial Implications**

The drainage and flood prevention revenue budget for maintenance of the existing system for 2001/02 is as follows:-

|                             |                |
|-----------------------------|----------------|
| Drainage & Flood Prevention | £108,00        |
| Drainage Cyclic Maintenance | 0              |
| Flood Relief                | £220,00        |
|                             | 0              |
|                             | <u>£21,000</u> |
|                             | £349,00        |
|                             | <u>0</u>       |

Although there is no specific provision in the roads capital programme for drainage or flood prevention measures in financial year 2001/02, the Roads and Environmental Services Committee has agreed an allocation of £142,400 for drainage and flood prevention works.

## **9      Legal Implications**

Contained within this report.

## **10     Policy Implications**

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

## **11     Recommendations**

I recommend that the Committee note the biennial report on the occurrence of flooding from October 1999 to October 2001 and the measures taken, or which the Director of Technical Services considered were required, to prevent or mitigate flooding of non-agricultural land.

## **12     Contact Officer**

Sandy Bremner, Graduate Engineer, extension 2314.

Director

SB/AW  
25 October 2001

## 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.         |
| 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> |