

Area West Committee - 20th March 2013

9. Flooding, Drainage & Civil Contingencies

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Purpose of Report

To provide an update on aspects of flood and water management, including recent changes to the various roles, powers and duties of land drainage.

There will be a Powerpoint presentation to accompany this report and if Members would like a copy of this or any of the individual slides they should contact the officer.

The Civil Contingencies & Business Continuity Manager will also attend the meeting to give a presentation on civil contingencies.

Public Interest

South Somerset has an extensive river and watercourse network with variable characteristics. The majority of the area ultimately drains in a north-westerly direction via the River Parrett then to the Bristol Channel. The catchment to the southwest of Chard drains via the River Axe to the English Channel.

The low-lying areas to the northwest are particularly susceptible to flooding from long duration rainfall whereas the upper parts of the catchment and the urban areas tend to be more susceptible to flooding in more intense rainfall conditions.

There are a number of organisations that have a role in respect of land drainage and flooding and their roles are set out in this report.

Recommendation

That members note and comment on the content of the report and presentation, including the updated information on land drainage responsibilities included in Appendix A.

Background, Legislation Changes and Policies

1. The Pitt Review

Following the severe flooding that affected parts of the country during summer 2007, the Government commissioned a report to assess the roles of various organisations in respect of flood risk management and to look at ways by which they could be improved.

The report – **The Pitt Review - 'Learning Lessons from the 2007 Floods'** – was prepared by Sir Michael Pitt and published in June 2008.

In looking at the various aspects of flooding, the Report came up with 92 recommendations and also identified the following basic issues:

- The need to ensure that flood risk from surface water is effectively addressed;
- The need for collaborative arrangements and partnerships between the various organisations involved in flood risk management;
- The leadership role to be undertaken by upper tier authorities (County and Unitary) and;
- Funding issues.

Recommendations from the Pitt Review have led to the new Flood & Water Management Act 2010.

2. Flood & Water Management Act 2010

The Act is seen as the ‘rationalisation’ of the various existing legislation into a new Act and in the process a number of other issues have been addressed.

One of the main provisions of the new Act is the designation of a new role of ‘Lead Local Flooding Authority (LLFA)’ and this role has been assigned to Principal Authorities (County/Unitary Councils). The LLFA’s have taken on many of the original land drainage and flooding functions of the Environment Agency in respect of ‘ordinary watercourses’ (i.e. not ‘main rivers’).

In addition LLFA’s have been allocated an overall strategic co-ordinating function in respect of flooding and additional **duties** to investigate flooding incidents in order to identify the appropriate body to deal with it.

In addition to a number of other roles, LLFA’s have also been allocated the role of dealing with surface water run-off issues that weren’t covered by previous legislation.

3. Flooding and Land Drainage Roles

a. What’s the same?

- District Councils, as a non-statutory function, can still use powers contained in Section 14 of the Land Drainage Act 1991 to carry out **improvements** to ‘ordinary’ watercourses (defined as all rivers, streams, ditches, drains, cuts, culverts, dikes, sluices and sewers – other than public sewers – and passages through which water flows) in order to alleviate flooding problems.
- The Environment Agency still has jurisdiction over main rivers.
- The Highway authority (Somerset County Council and/or Highways Agency) is still responsible for highway drainage/flooding.
- Landowners (riparian owners) are still ultimately responsible for maintenance of watercourses adjacent to their own property.

b. What’s changed

- Consenting/enforcement powers under Section 23 of the LD Act 1991 for structures (culverts, pipes, weirs, bridges, etc.) in watercourses are now with Somerset County Council as the ‘Lead Local Flooding Authority’ (this function was previously with EA).

- Section 25 powers (enforcement of **maintenance** by riparian owners) are now with County Council (previously with District Council and/or County Council). This role can be delegated to District Councils under an agreement.
- Reservoir regulations have changed in respect of the requirements for owners to carry out monitoring of dam structures, etc. and prepare emergency plans. These new regulations apply to Chard Reservoir although this was already the subject of previous regulations.

c. What's new

- New role for County Council as 'Lead Local Flood Authority' (LLFA) which brings with it:
 - A strategic co-ordinating function,
 - Duty to act consistently with national and local strategies,
 - Duty to investigate flooding incidents and determine which authority should respond,
 - Power to request information from other drainage bodies (District Councils, Drainage Boards, EA),
 - Powers (under revised S14) to deal with surface water and ground water flooding problems,
 - Role as SUDs Approval Body for approving and adopting SUDs on new developments.
- Duty for all drainage bodies to cooperate with each other and provide information.

4. Current SSDC Policies and Procedures

a. General Policy

The Council's general policy with regard to flooding has always been to alleviate internal flooding of properties. This policy was last reviewed by District Executive at their meeting in September 2002 when it was confirmed that:

"the Council will, subject to availability of resources and finance, use its best endeavours and permissive powers to alleviate internal flooding of properties."

b. Emergency Assistance

At the same meeting the Council's District Executive approved a policy in respect of provision of sandbags. This policy currently states that:

"Priority will be given in the provision of sandbags to domestic property at imminent risk of an internal flooding emergency and that the number of free sandbags will normally be limited to 6 per external doorway (excluding doorways to garages or outbuildings)."

c. Routine Maintenance

In order to ensure continued effectiveness of watercourses that have been improved as part of past flood alleviation schemes, maintenance works are carried out by the Council's Streetscene Services operatives. The total length of watercourse maintained is approximately **11km** and the internal cost recharged in this respect for 2012/13 will be **£20,094**.

The extent of these works decreased significantly in 2006 when the Environment Agency took on responsibility for some of these watercourses ('Critical Ordinary Watercourses') and engaged the Streetscene Services team to maintain them under contract. This contract ceased on 1st July 2012 when the EA took this work on themselves.

In addition to the routine maintenance of watercourses the Council's Streetscene team also check some **63** debris screens on a regular basis. The internal cost recharged in this respect for 2012/13 will be **£15,820**. A number of these debris screens relate to culverts passing under the highway that are, technically, the responsibility of the Highway Authority and the possibility of recharging this element of the costs (approximately £2,100) is being investigated.

The extent of the routine maintenance carried out by the Council was subjectively reviewed in 2006. This review resulted in some reduction of lengths of watercourse maintained, focussing on those lengths that were considered 'critical' to the drainage system. The current schedule of routine maintenance is shown at Appendix B.

d. Capital and Minor Works

SSDC has, since the mid '70's, maintained a fairly active role in dealing with flooding problems and providing assistance and advice to members of the public in this respect. Since that time **45** Capital flood alleviation schemes have been implemented, mostly with Government grant aid, at a total cost of approximately £3.5m.

Changes in Government funding criteria and availability a few years ago resulted in a switch from implementation of Capital projects to minor works using the Council's Revenue funds. This was seen as a way of providing more responsive basic flood relief across a broader area. Since 2006 an annual average of approximately £24,000 has been used to deliver a total of approximately 180 of such drainage improvement works.

e. Emergency Assistance

Since 1998 (when records started), approximately **50,000** sandbags have been issued with over **7,000** of these being in 2012. In order to make the service more efficient the option of establishing local storage/collection points for sandbags has been looked at and discussed with various parish councils but identifying suitable venues/access has often proven to be problematical. Logistical problems in the distribution of large numbers of sandbags to various locations have, in the last few years, prompted the purchase of special, gel-filled bags that are much easier (and safer) to transport in large numbers.

In recent years the focus has been more on giving advice to members of the public about ways in which they can help themselves in dealing with flooding of their property although this is generally only appropriate where works required are within their own property rather than on 3rd party land. To this end a series of public Flood Awareness workshops have been held. The use of flood boards or similar devices as a more effective alternative to sandbags has been promoted at these workshops.

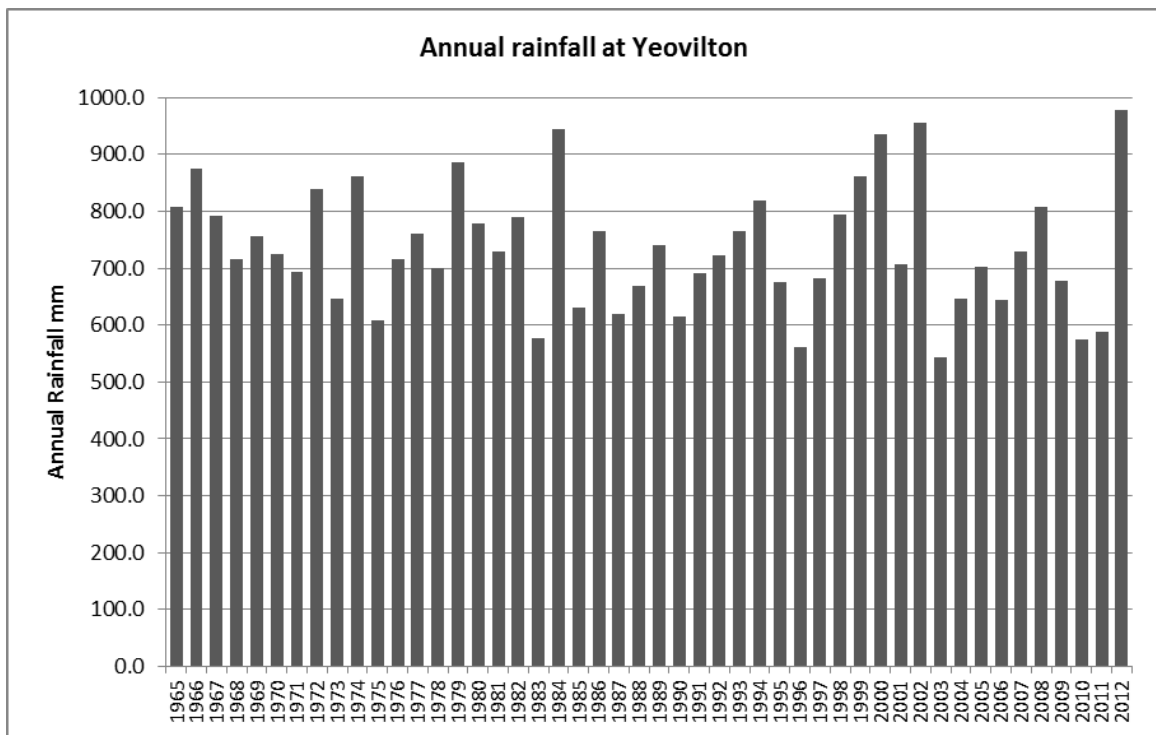
Flooding 2012

Rainfall 2012 – Met Office Summary

The following represents a Met Office assessment of the weather experienced across the UK during 2012 and how it compared with the long term averages for the period 1981 to 2010.

- 2012 was a year of dramatic contrast. The relatively warm and dry first three months were followed by an abrupt shift in weather patterns bringing an exceptionally wet period for most of the country from April lasting through much of the summer.
- The UK annual rainfall total was 1331 mm (115% of average), the second highest in the series from 1910, narrowly beaten by 2000 (1337 mm). England had its wettest year in the series.
- 2012 was the third wettest year in the England and Wales series from 1766, behind 1872 and 1768.
- Many locations from the south-west to the north-east received over 135%, with northern Scotland and the west of Northern Ireland the drier exceptions.
- The year began with ongoing concerns over long-term drought heightened by a relatively dry January to March, but the situation was then transformed by the wettest April and June in the England and Wales series from 1766, while summer (June, July, August) was the wettest since 1912.
- Rainfall totals for autumn and December remained well above average, and a succession of rain events in late November and late December contributed to extensive disruption from flooding.
- Annual rainfall figures for Yeovilton dating back to 1965 are shown in the graph below where the figure of 977mm in 2012 is the highest recorded.

Historical Rainfall Figures



Flooding in South Somerset 2012

The exceptional rainfall conditions for 2012 outlined above were particularly unusual, not necessarily for the total volume, but for the pattern of the rainfall. In previous years flooding has generally occurred because of fairly intense rainfall over a relatively short period of time. This has generally allowed groundwater conditions to recover. However, in 2012, the ground has been saturated over long periods and the ‘sponge’ effect was lost resulting in almost 100% run-off from agricultural land bringing with it much silt and debris to block drainage systems.

During 2012 notable flooding events occurred on 7th July, 21st November and 31st December. During the year the District Council's emergency crews worked extremely hard, often in difficult circumstances to distribute over **7000** sandbags to some **530** locations across the District as summarised in the table below.

Sandbag Deliveries 2012 (see Appendix C for Parish details)

	Locations	Sandbags issued
Area North	299	3803
Area South	28	363
Area East	82	1204
Area West	121	1633
Totals	530	7003

The approximate cost of this emergency assistance provided by the Council was **£28,000** but without it we can safely assume that considerably more properties would have been flooded than have been reported.

Following the November flooding event questionnaires were issued to all parish councils requesting feedback about flooding in their parish. To date only **28** responses have been received and these have identified internal flooding to **51** properties. The true figure is difficult to establish as not all property owners report flooding.

Financial Implications

None from this report.

The annual budget for minor works in 2012-13 is £25,000. Routine maintenance costs by Streetscene Services for screen and watercourse maintenance is around £36,000 in the 2012-13 budget.

Council Plan Implications

Focus Two: Environment

- We will continue to support communities to minimise flood risk.

Background papers: *None*