

## **Flooding, Drainage & Civil Contingencies**

*Strategic Director:* Vega Sturgess, Operations & Customer Focus  
*Assistant Director:* Laurence Willis, Environment  
*Service Managers:* Garry Green, Engineering & Property Services Manager  
Pam Harvey, Civil Contingencies & Business Continuity Manager  
*Lead Officers:* Roger Meecham, Engineer  
Pam Harvey, Civil Contingencies & Business Continuity Manager  
*Contact Details:* roger.meecham@southsomerset.gov.uk or 01935 462069  
pam.harvey@southsomerset.gov.uk or 01935 462303

### **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 and a summary of recent flooding events.

There will be a 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.

### **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 southeast catchment drains via the R Cale to the English Channel.

As has been well demonstrated in the flood events of November/December 2012 and again in December/January/February 2013/14 the low-lying areas of the Somerset Levels 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. Their roles are set out in this report and at Appendix A.

### **Recommendation**

That members note and comment on the content of the report and presentation.

#### **1. Background and Legislation Changes**

Following the flooding events in 2007 a review of the roles of various organisations in respect of flood risk management was carried out by Sir Michael Pitt. This '**Pitt Review**' looked at ways by which the roles could be clarified and improved. The Review also identified:

- The need to ensure that flood risk from surface water (pluvial flooding) is effectively addressed (rather than just fluvial flooding);

- 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)

These changes have now effectively been brought about by the Flood & Water Management Act 2010. The Act is seen as the 'rationalisation' of the various existing legislation 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 and District Councils in respect of 'ordinary watercourses' (i.e. not 'main rivers').

In addition LLFA's have also been allocated the role of dealing with surface water run-off issues that weren't covered by previous legislation.

LLFA's have also 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.

### **Summarising the 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 Somerset 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. This is seen as an important new function as it should hopefully resolve the adoption issues. Please note that this particular function has yet to be introduced – the target date is currently October 2014.**
- Duty for all drainage bodies to cooperate with each other and provide information.

The current roles of the various drainage organisations are set out in Appendix A.

## 2. 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)."*

Since 1998 (when records started), approximately **55,000** sandbags have been issued with over **7,000** of these being in 2012 and in excess of **4000** in 2013/14. This is in addition to other emergency works and assistance carried out by the Council's crews whilst operating in flooded areas. 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 3<sup>rd</sup> party land. The use of flood boards or similar devices and/or the creation of permanent defences such as raised steps are seen as more effective alternatives to sandbags and are generally advocated.

In addition to the provision of sandbags the Council's Civil Contingencies role involves

- collation of information and requests for assistance (including evacuations);
- assisting with the setting up of emergency rests centres and
- regular communication with the County-wide Civil Contingency Unit

### 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 currently maintained is approximately **11km** and the internal cost recharged in this respect for 2013/14 was **£20,495**.

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 2013/14 was **£16,136**.

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.

### d. Capital and Minor Works

SSDC has, since the mid '70's, maintained an 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 the year 2000 an annual average of approximately **£20,000** has been used to deliver a total of approximately **355** of such minor drainage improvement works.

Expenditure/Budget figures for the Land Drainage Revenue Budget are set out below for information. Please note that, apart from costs of purchasing 'gell' sandbags, these costs don't include those relating to provision of emergency assistance during the recent winter flooding. These additional costs are understood to be in the order of £47,000.

	2011-12	2012-13	2013-14
Routine Maintenance	35,072	36,841	36,632
Minor works/projects	22,487	12,349	17,145
Emergency(gell-bag purchases, etc.)	3,754	14,975	11,895
Miscellaneous items	3,012	3,079	217
<b>TOTALS</b>	<b>64,325</b>	<b>67,244</b>	<b>65,889</b>

### **3. Rainfall and Flooding 2013/14**

#### **a. Rainfall for Winter 2013/14**

##### ***Met Office Summary:***

*“Winter 2014 was an exceptionally stormy season, with at least 12 major winter storms affecting the UK in two spells from mid-December to early January, and again from late January to mid-February....*

*....The persistent heavy rainfall through the season resulted in this being the wettest winter for the UK, England, Wales and Scotland, and the second wettest winter for Northern Ireland in series from 1910. It was also the wettest winter in the long running England and Wales Precipitation series from 1766. There were more days of rain during the winter than any other in a series from 1961. There was major flooding with the Somerset Levels remaining underwater for much of the season, and flooding also affected large sections of the River Thames.....*

*.....Rainfall totals in December exceeded twice the monthly average across much of south-east England and Scotland, where it was the wettest calendar month in a series from 1910. The UK overall recorded 154% of December average rainfall. In January, much of southern England recorded two to three times the average rainfall and in south-east England it was the wettest calendar month in the series from 1910. The UK overall recorded 151% of January average rainfall. The wet theme continued through February which was the 4th wettest in the series. For winter overall the UK received 161 % of average rainfall. Some parts of the country had in excess of twice average winter rainfall and the region of south east and central south of England had 238 % of average.”*

For the months of December, January and February Met Office rainfall totals for Southwest England were 203.4mm, 247.8mm and 219.4mm respectively all of which are significantly above the ‘norm’.

#### **b. Flooding in South Somerset 2013**

A similar pattern of rainfall to that experienced in December 2012 occurred again in December 2013 and January/February 2014 whereby the ground was saturated over long periods and the ‘sponge’ effect lost resulting in almost 100% run-off from agricultural land bringing with it much silt and debris to block drainage systems.

This gave rise to a number of ‘local’ flooding problems affecting properties and highways. Highway flooding was a particular feature of the flooding and much of this can be attributed to surface water run-off from fields as mentioned above. Highway flooding problems are referred to Somerset County Highways.

The main impact of the almost continual run-off was, of course, very severe in low-lying areas particularly the Somerset Levels where some 120 properties were reportedly subject to flooding, access to some communities was cut off and agricultural land was submerged over an extended period. About one third of the affected properties on the Somerset Levels are within the SSDC area.

During the flooding event the District Council’s emergency crews and other officers worked extremely hard, often in difficult circumstances, to distribute in excess of **4000** sandbags to a considerable number of locations across the District. In addition, and in conjunction with other emergency service providers, there was a considerable amount of general emergency

assistance provided by the Council. Without this we can safely assume that considerably more properties would have been flooded and people's lives affected. Council officers were also much involved in dealing with the social impact, health matters and evacuation procedures relating to the flooding emergency.

#### **4. 'Action Plan'**

Following a request from Central Government for a 20 year 'Flood Action Plan' a series of high level, multi-organisational discussions took place to identify possible measures and/or strategies to prevent or reduce the scale of the flooding that has occurred in recent years.

The measures include both long term and short term provisions and the key objectives of the 'Somerset Levels Flood Action Plan', as set out in the Executive Summary, are to:

- a. Reduce the frequency, depth and duration of flooding.
- b. Maintain access for communities and businesses.
- c. Increase resilience to flooding for families, agriculture, businesses, communities, and wildlife.
- d. Make the most of the special characteristics of the Somerset Levels and Moors (the internationally important biodiversity, environment and cultural heritage).
- e. Ensure strategic transport connectivity, both within Somerset and through the county to the South West peninsula.
- f. Promote business confidence and growth.

The essential elements to achieve the above objectives consist of:

##### **Risk reduction actions:**

- i. Dredging and river management
- ii. Land management – recognising that what happens in the upper and mid catchment has an impact on the lowlands
- iii. Urban run-off

and

##### **Mitigation actions:**

- i. Infrastructure resilience (road, rail, sewerage, power and telecommunications)
- ii. Building local resilience

Significant progress is being made in respect of many of the identified actions and this progress is set out in Appendix B – this progress report is available on the Somerset County Council website at <http://somersetnewsroom.com/flood-action-plan/> where further details of the 'Somerset Levels and Moors Flood Action Plan' can also be seen.

One specific element of the Action Plan in respect of 'river management' relates to the creation of a ring bank to protect the village of Thorney. Members will recall that at their meeting in May they agreed to provide a grant of £10,000 towards this scheme, a further £5,000 has been allocated from the Council's land drainage revenue budget. Based on Tenders received the cost of works will be approximately £161,000. Funding of this project is as follows:

Internal Drainage Board	£20k (design costs)
South Somerset District Council	£15k
Kingsbury Episcopi Parish Council	£1k
Somerset County Council (balance)	£145k

Works have commenced and were expected to be completed by mid-October.

## 5. Financial Assistance

The Government has recently introduced various financial measures to assist those residents and business owners who have been affected by the flooding. These measures are posted on the Council's website and include:

- Council Tax discounts for residents on the Somerset Levels whose properties were either flooded or inaccessible;
- A Repair and Renewal Grant of up to £5,000 for householders whose property was flooded to use for carrying out building resilience or resistance measures;
- Business Rates relief for those whose businesses have been flooded;
- A Business Support Scheme for those whose businesses have been otherwise adversely affected;
- A Repair and Renewal Grant of up to £5,000 for business owners to use for carrying out building resilience or resistance measures.

It is understood that, to date, approximately 40 enquiries relating to domestic 'R&R' Grant have been received from which 17 applications have been submitted and are being considered. In respect of business 'R&R' grants some 11 enquiries have been received from which 8 applications have been submitted.

In addition to the above, Somerset County Council is offering, as they did last year, help for communities and community groups through a £200,000 **Flood Mitigation Fund**. This funding is to enable communities to be more resilient against the effects of flooding and is aimed at small scale community schemes such as clearing ditches, building earthworks and other defences.

## Financial Implications

None from this report.

## Council Plan Implications

Focus Two: Environment

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

**Background papers:** *None*