Waste topic paper 8:

Strategic Flood Risk Assessment (SFRA): non-technical summary

Somerset County Council

Minerals and Waste Development Framework

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Somerset County Council
Environment Directorate
Minerals and Waste Policy, C Block (PPC601c)
County Hall, Taunton
Somerset, TA1 4DY
Tel: 0845 345 9188
Email: mineralsandwaste@somerset.gov.uk

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Introduction

Flood risk management is an important issue, particularly in a low-lying county such as Somerset. A presumption in favour of sustainable development needs to take account of flood risk, informed by central government policy on flood risk management. Positive planning can avoid, reduce and manage flood risk by taking full account of the following factors when making decisions about applications for new development:

- present and future flood risk, involving both the statistical probability of a flood occurring and the scale of its potential consequences, whether inland or on the coast; and
- the wider implications for flood risk of development located outside flood risk areas.

The Waste Core Strategy is the main Development Plan Document (DPD) on waste in Somerset's Minerals and Waste Development Local Development Framework (minerals and waste LDF, or MWDF for short).

This report provides a non-technical summary of the first stage in the process of assessing flood risk in Somerset, via the preparation of a Strategic Flood Risk Assessment (SFRA) Level 1.

Somerset County Council commissioned consultants Scott Wilson to undertake this research as part of the evidence base supporting the minerals and waste LDF. The full SFRA report and a subsequent update report, both produced by Scott Wilson, are available on request from the Minerals and Waste Policy Team (contact details on page 2 of this document).

Since this research was undertaken, Somerset County Council has been designated as a Lead Local Flood Authority (LLFA) following central government's adoption of the Flood and Water Management Act 2010. This Act responds to recent pressure to introduce legislation to address the threat of flooding and water scarcity, both of which are predicated to increase with climate change. The Flood Risk Management team based within Somerset County Council will deliver on the requirements of this Act for the county, including creating a flood risk management strategy and managing future input into the planning process to ensure suitable sustainable drainage systems have been included. Further work on waste planning policy will need to take account of emerging research on flood risk in Somerset, as well as the evolving national policy and guidance.

Relevant planning policy and guidance

Planning Policy Statement 25 (PPS 25) sets out central government's current planning policy on development and flood risk. All forms of flooding and their impact on the natural and built environment are considered material planning considerations.

PPS 25 places a duty on local planning authorities to carry out a Strategic Flood Risk Assessment to inform the development of Local Development Documents.

Planning Policy Statement 1: Delivering Sustainable Development sets out central government's objectives for the planning system, and how planning should facilitate and promote sustainable patterns of development, avoiding flood risk and accommodating the impacts of climate change.

It is the government's intention to replace Planning Policy Statements with the National Planning Policy Framework (NPPF), a simplified, concise document setting out national planning priorities and rules. Consequently, the National Planning Policy Framework document, currently in draft format, will integrate the essential elements of PPS1 and PPS25, with other relevant issues in a single, successor document to current planning guidance.

When considering the location of new development, the draft NPPF advocates a risk-based approach, avoiding or minimising flood risk to people and property where possible and managing residual risk. It brings together the linked themes of climate change, flooding and coastal change.

New development is detailed in the draft NPPF as an area where planning should assist in avoiding increased vulnerability to impacts from climate change. The document advocates risk management and the use of green infrastructure as some of the measure which should be implemented.

The draft NPPF also advocates that Local Plans should apply a sequential test, considering sites in Flood Zone 1 before Zones 2, 3a and 3b consecutively, and classifying the vulnerability of development to aid this process. This process should apply to all non coastal development. Coastal development is further protected by the process detailed below,

Via its planning policy, central government aims to ensure that our coastal communities continue to prosper and adapt to coastal change. This means planning should prevent new development from being put at risk from coastal change by:

(i) avoiding inappropriate development in areas that are vulnerable to coastal change or any development that adds to the impacts of physical changes to the coast, and
(ii) directing development away from areas vulnerable to coastal change

The NPPF states that local authorities should identify any area likely to be affected by physical changed to the coast and designate these as Coastal Change Management Areas. As yet there are no such designations in Somerset.

The Somerset Coastal Change Pathfinder project, a community led project seeks to assist coastal communities who are most at risk from issues associated with sea level rise and help them adapt to projected changes at the coast. More information about this project can be found on this website: http://www.somersetcoastalchange.org.uk/

Sustainable urban drainage

Central government plans to publish a Water White Paper in 2011, which will include details on reforms to the abstraction regime (helping to meet water needs and protect ecosystem function) and on mechanisms to encourage the retrofit of Sustainable Drainage Systems (SUDS) in local communities.

Greater emphasis will be placed on drainage designs that sustainably manage surface water from new developments; these will need to accord with new standards.

The Flood and Water Management Act 2010 makes provision for top-tier local authorities to be designated as Sustainable Drainage Approval Bodies (SAB). Under this proposed legislation the County Council (or its agent) as SAB for Somerset will be required to:

- Approve proposed drainage systems in new and redevelopment sites in accordance with national standards;
    - the right for new developments to connect their surface water drainage to the public sewerage system is conditional upon this;
    - Construction will not be able to commence without SAB drainage approval.
- Adopt and maintain SUDS which serve more than one property in accordance with national standards;
- Maintain a register detailing all approved SUDS structures and features.

There will be two approval routes by which the SAB will be engaged to carry out these tasks; either as part of the planning process or through a direct application to the SAB.

Current indications are that this part of The Flood and Water Management Act 2010 will be enacted in 2012 and it is likely the duties will be phased. At the time of preparing its Waste Core Strategy, Somerset County Council is engaging with DEFRA and planning its approach to these upcoming duties.

Preparing a Strategic Flood Risk Assessment (SFRA)

Strategic Flood Risk Assessment (SFRA) Level 1 provides a broad scale flood risk assessment for the county (fluvial and tidal) using existing flood data, principally from the Environment Agency and Local Planning Authorities' individual Level 1 and more detailed Level 2 (where done) SFRAs.

The Level 1 SFRA documents and maps historic flooding incidents, areas at risk and which might be at risk from flooding in the future and existing flood defences. There should be sufficient information in the Level 1 SFRA to enable an exception test to be carried out if necessary as part of a Level 2 SFRA.

An exception test provides a method of managing flood risk while still allowing necessary development to occur. The exception test is only appropriate for use when there are large areas of the proposed development in Flood Zone 2 and 3 and, according to PPS25, 'where the Sequential Test alone cannot deliver acceptable sites, but where some continuing development is necessary for wider sustainable development reasons, taking into account the need to avoid social or economic blight'.

For the exception test to be passed:

a) it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA where one has been prepared;

b) the development should be on developable previously-developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and

c) a Flood Risk Assessment must demonstrate that the development will be safe, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.

The exception test should be applied by decision-makers only after a sequential test has been applied.

As well as informing the development of the Level 2 SFRA and LDF policies, the SFRA should also be used to inform development management / control decisions, including requirements for site specific Flood Risk Assessments.

The Level 1 SFRA provides a summary of existing policies, guidance and the evidence base which will be taken into account in development of the Waste Core Strategy[i]. In turn it goes further, drawing out key elements of guidance, regulations and practice in planning for and delivering development within flood risk zones including from PPS25 and its Practice Guide, Flood Risk Assessments guidance, Pollution Prevention Guidelines, the Policy and Practice for Protection of Groundwater and advice on the use of Sustainable Drainage Systems (SUDS).

Over time, it is anticipated that more detailed work on flood risk in Somerset will be carried out by the Flood Risk Management team, based within Somerset County Council. The minerals and waste policy team will need to take account of emerging research in its policy formulation, monitoring and delivery.

Flooding data on Somerset

Flood risk maps covering selected settlements in Somerset have been produced as part of the SFRA Level 1 to aid further work on site identification and allocation[ii]. The settlements have been selected in areas identified as potential minerals sites and location where waste development sites are likely to be located based on centres of population over the plan period.

It is important to note that the Level 1 SFRA provides only one element of the many land use constraints required to help assess the appropriateness or not of potential sites. Other constraints, assets and opportunities mapping will be required to provide a fuller picture of suitability of sites.

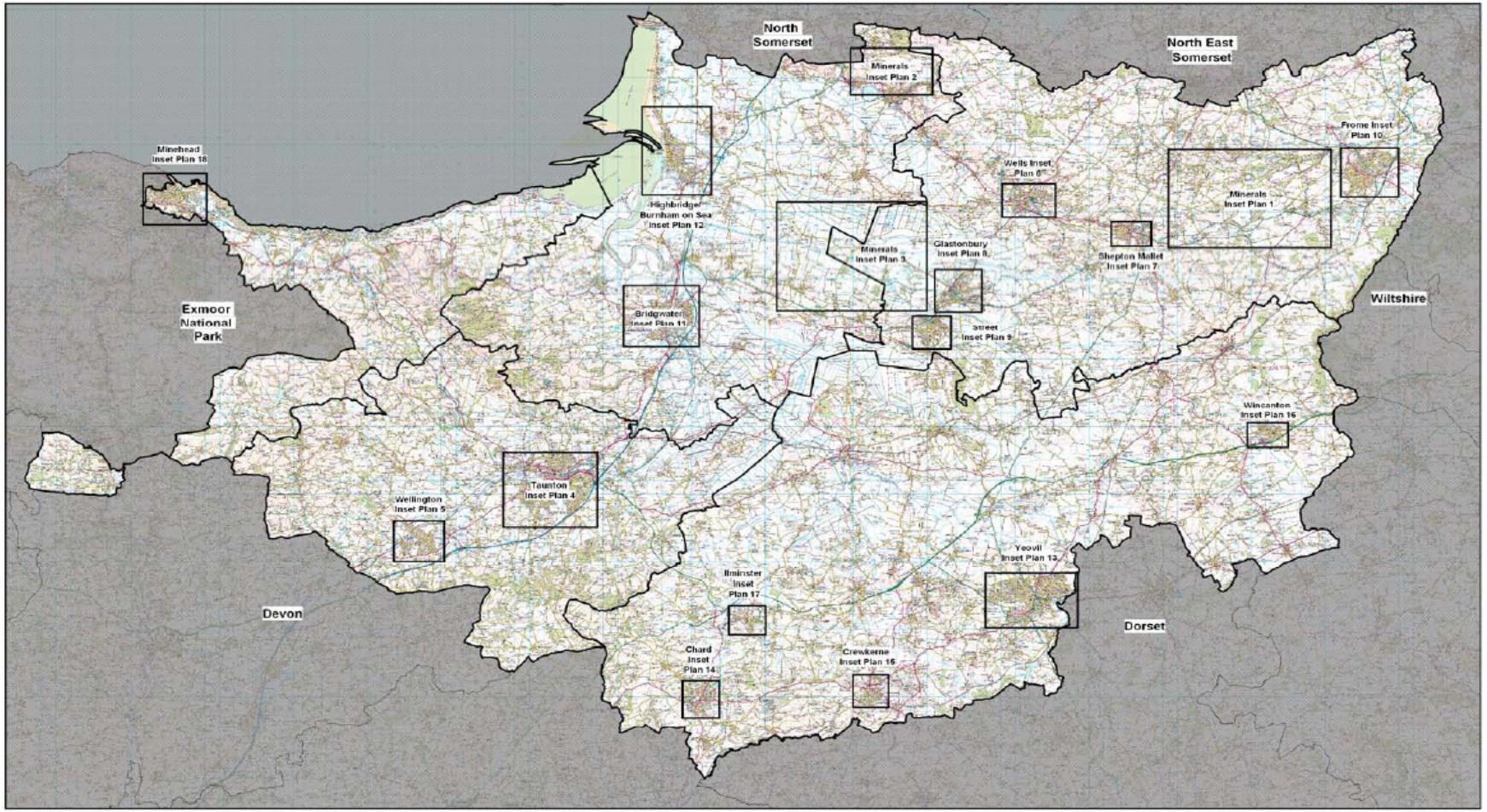
The data used for the maps is drawn predominantly from a combination of Local Planning Authority and Environment Agency sources (for example, its Flood Risk maps[iii]) with additional data on historic incidences of flooding from Devon and Somerset Fire and Rescue Service and the Highways Agency.

The Flood Risk maps should be interpreted alongside Level 2 SFRA mapping data (where available) for those areas which Local Planning Authorities have commissioned studies. Further details are available in the update SFRA report, available on request - contact details at the start of this report.

Since the completion of the Level 1 SFRA report, the Environment Agency has produced maps which cover “Areas Susceptible to Surface Water Flooding” and “Flood Maps for Surface Water”, the data for which is made available to Local Planning Authorities. This should also be taken into account alongside the maps produced in the Level 1 SFRA report.

More detail on flooding data and mapping outputs are set out in the main Level 1 SFRA report and update report (available on request – contact details can be found on page 2 of this report).

Flood Risk Maps included within the Level 1 SFRA Report



Settlement commentary

The SFRA Level 1 in Appendix 1 has revealed that all settlements identified have land in Flood Zone 1 and most have some land in Flood Zones 2 and 3a / 3b.

Some settlements have more land in higher risk areas than others. For example, Bridgwater has relatively little land in Flood Zone 1 with significant areas of the town within Flood Zone 3; and, Highbridge / Burnham on Sea is mostly within Flood Zone 3.

These comments are made only on the basis of the data presented and without knowledge of potential sites that might be considered for future waste development.

Classifying vulnerability

This SFRA has been carried out to enable flooding issues to be effectively considered and a sequential test to be carried out to guide waste management development in Somerset may occur. Applying the sequential test will help to steer waste management development toward sites in Flood Zone 1 (described earlier); if there are no appropriate sites available in this zone, Zones 2 and then 3a and 3b should be considered. Sites identified outside of Flood Zone 1 should be subject to an exception test. The table that follows illustrates the sequential test and vulnerability classification as it relates to minerals and waste facilities (adapted from tables in Planning Policy Statement 25 and the Level 1 SFRA).

In addition to fluvial and tidal flooding, other sources of flooding should be considered including overland flow, groundwater, sewers and artificial sources. If potential sites are likely to be impacted by any of these, the source and frequency of flooding event should be examined.

When potential sites have been identified through this process, the appropriateness or not of potential sites within the same flood zone should be compared for the rate of flooding, flood water depth, flood water velocity and flood risk management measures.

Sequential Test	Acceptable Flood Zone	Vulnerability Classification: Acceptable Flood Zone for Waste and Minerals Development					
		Water compatible development		Less vulnerable			More vulnerable
		Sand and gravel workings	Peat extraction[iv]	Waste treatment[v]	Minerals working & processing[vi]	Sewage treatment plants[vii]	Landfill[viii]
Flood Zone 1 Low probability of flooding[ix]		✓	✓	✓	✓	✓	✓
Flood Zone 2 Medium probability of flooding[x]		✓	✓	✓	✓	✓	✓
Flood Zone 3a High probability of flooding[xi]		✓	✓	✓	✓	✓	
Flood Zone 3b Functional floodplain[xii]		✓[xiii]	✓[xiv]				

n.b. minerals issues (in the form of sand and gravel workings and peat extraction) have been included in the table above to set the SFRA work in context. The waste LDF is prepared alongside a minerals LDF. The SFRA undertaken to support both pieces of work

Learning from the SFRA

The Level 1 SFRA highlighted various issues and recommendations for Somerset County Council to consider when preparing its minerals and waste LDF. These are summarised below under relevant headings.

Local flood risk

- Flood risk is a significant issue in many parts of Somerset, with historic or potential flood sources in almost all the areas identified in the SFRA Level 1 (see Appendix 1)

- The SFRA Level 1 has revealed that, whilst future waste sites have yet to be identified, most settlements examined in the study have some land within Flood Risk Zone 1. However, some settlements (such as Bridgwater) have limited supply of land in Flood Zone 1.

- In all areas it must be noted that flood risk should not be considered in isolation. There may be competing land uses for areas of low flood risk or other constraints that need to be considered and there are mitigation measures that can be taken to reduce flood risk.

Flood Risk Management

- Requirements for Flood Risk Assessments specified in PPS25 (Annex E) should be followed.

- The cumulative impact of draining development sites (i.e. a potential increase in surface water run-off) should be taken into account.

- Where development introduces a reduction or removal of floodplain storage, storage levels must be replaced elsewhere.

- The Level 1 SFRA recommends the opening up of culverted watercourses and provision of safe access, egress and evacuation during flood events (1% fluvial and 0.5% tidal).

- Opportunities should be taken to reduce flood risk by restoring peat workings and quarries (in the Mendip Hills) and to ensure new flood storage capacity is achieved as part of this process.

Sustainable Drainage

- Where possible, Sustainable Drainage Systems (SUDS) should be included in all new waste sites to help manage flood risk.

- Run-off from a site should not increase as a result of new development on greenfield or brownfield (previously developed) sites. Indeed, opportunities should be taken to improve attenuation or reduce run off. Run off attenuation should be provided through the use of SUDS and allowances should be made for anticipated climate change impact. Run off and / or discharge rates should be restricted to greenfield run off rates in areas known to have a history of sewer and / or surface water flooding.

- Design of waste management facilities should incorporate SUDS and aim to route water away from vulnerable property and avoid creating hazards to access and egress routes.

Water Environment

- Drainage systems should limit the occurrence of pollution to the water environment.

- Buffer zones should be maintained adjacent to the river bank for access for maintenance, to ensure a wildlife corridor and allow natural processes to occur within the floodplain.

General comments on planning policy development

When reviewing the data from flood risk assessment and developing relevant planning policy, the principles embedded in PPS25, and the emerging draft National Planning Policy Framework should be followed to minimise flood risk and help determine appropriate locations for waste and minerals sites (i.e. guide development to the lowest risk sites).

This includes considering sites in Flood Zone 1 before Zones 2, 3a and 3b consecutively, and classifying the vulnerability of development to aid this process.

The application of a sequential approach should prevent the promotion of sites that are inappropriate on flood risk grounds. In addition to fluvial and tidal flooding, other sources of flooding that should be considered in the sequential

test process include overland flow, groundwater, sewers and artificial water sources. If potential sites are likely to be impacted by any of these, the source and frequency of flooding event should be examined. NB: during this process, it should be borne in mind that some sites may have a different, preferred use over waste development due to various factors such as economic viability and social or environmental impact, so the issue of flood risk cannot be considered in isolation.

The Waste Core Strategy for Somerset will not identify individual sites. It will however detail zones of the county where strategic waste development could be located, and flooding probability has been an important factor in identifying, shaping and reviewing these zones informed by the SFRA Level 1, its update report and more recent flooding data. More information on how these zones were developed can be found in Waste Topic Paper 2 (WTP2) available from www.somerset.gov.uk/mineralsandwaste

It will be important to ensure that the Waste Core Strategy sets an appropriate foundation for applying a sequential test in its development management policies. This can be done by considering factors such as volume, direction and rates of flow of ground and surface water in the development area and by exploring whether the development proposal will increase flood risk, either from rivers and the sea, or from rainfall.

Having adopted the Waste Core Strategy, the County Council will prepare a Site Allocations Development Plan Document (DPD). This document will identify sites acceptable in principle for waste management in the plan period. It will conform to the policy laid out in the Waste Core Strategy.

When potential sites have been identified, the appropriateness or not of potential sites within the same flood zone should be compared for the rate of flooding, flood water depth, flood water velocity and flood risk management measures.

The viability of waste sites should be assessed as part of reviewing the deliverability of the proposed approach.

The data is constantly changing

The SFRA evidence base should be updated, as with other LDF evidence base, on a regular basis to ensure that the data and the policies which arise as a result, are up-to-date. Making this update part of the County Council's internal annual monitoring process would be beneficial, both to maintain the evidence base.

Important external data sources include other Local Planning Authorities and the Environment Agency in particular and appropriate dialogue should be maintained with these organisations and with developers. This will help to ensure accuracy of data / mapping and a full understanding of flood risk, implications of that risk and the relationship between waste and mineral site

allocation / development proposals and planning for other development. Furthermore, the importance of dialogue across County Council Directorates and services must not be underestimated.

Somerset County Council might wish to approach the other Local Planning Authorities where a Level 2 SFRA has yet to be undertaken and is required so that both parties can share the costs of commissioning the work, if this work cannot be done either in-house or in partnership with, for example, the Environment Agency. The latter two options should be explored before proceeding to commission consultants due to potential cost savings and the development / retention of intellectual capital within the organisation.

A recent review of Local Planning Authorities in Somerset indicates that most have completed Level 2 SFRA studies. The continuing work of the other District and Borough Councils in Somerset should be taken into account to help determine site suitability.

The table below provides further information on these other SFRAs.

District/Borough Council	**Location of Strategic Flood Risk Assessment**	
Mendip	SFRA Level 1 completed – not available online	
Sedgemoor	SFRA Level 1 + 2 completed	http://www.sedgemoor.gov.uk/index.aspx?articleid=5851
South Somerset	SFRA Level 1 completed	http://www.southsomerset.gov.uk/planning-and-building-control/planning-policy/evidence-base/district-wide-documents/south-somerset-strategic-flood-risk-assessment/
Taunton Deane	SFRA Level 1 + 2 completed	http://www.tauntondeane.gov.uk/irj/go/km/docs/CouncilDocuments/TDBC/Documents/Forward%20Planning/Evidence%20Base/SFRA.pdf
West Somerset	SFRA Level 1 + detailed level 2 completed	http://www.westsomersetonline.gov.uk/Planning---Building/Planning-Policy/Local-Development-Framework/Evidence-Base-Information/Level-2-(Detailed)-Strategic-Flood-Risk-Assessment

Planning policy and guidance are evolving too. Officers should take account of changes to the national planning system and how these may impact on the recommendations arising from the SFRA already undertaken.

Next Steps

The Level 1 SFRA suggests the next steps which Somerset County Council will be taking to apply the outcomes of the Level 1 SFRA. These are summarised below.

Existing sites

- Assign each site with a vulnerability classification.

Potential sites

- Map potential sites (as part of the Site Allocations Development Plan Document).
- Determine the flood zone(s) in which the potential site/s is located.
- Identify the life of the development and consider against the potential impact of climate change.
- Identify existing flood defences which serve potential sites.
- Appraise all potential sites using the sequential test and vulnerability classification starting with those sites considered as “More Vulnerable”, i.e. the most constrained in flooding terms.

Appendix 1

Level 1 Strategic Flood Risk Assessment

Settlement	Flood Zone 2 (mainly **F**luvial or **T**idal)	Flood Zone 3a/b (mainly **F**luvial or **T**idal)	Main River	Historic / Potential Flood Sources	Other comments
Taunton	✓ **(F)**	✓ **(F)**	✓	✓	Much of the flood risk in Taunton is due to the presence of the River Tone and tributaries, with Flood Zones 2 and 3a in the town and 3b outside the built-up area. A large number of historic flooding incidents are either fluvial or likely to be due to sewers over-flowing.
Wellington	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Wellington is located within Flood Zone 1 (low risk). Land to the west of Wellington is located within Flood Zones 2 and 3b. There are a number of unknown historic flood incidents located within the Wellington area. Many are likely to be related to fluvial flooding.
Wells	✓ **(F)**	✓ **(F)**	✓		The majority of Wells is located within Flood Zone 1 (low risk). There are narrow areas of Flood Zone 3b adjacent to the river. A larger area of land towards the south west of Wells is located within Flood Zone 2 (medium risk). There are a limited number of recorded historic flood incidents within Wells.
Shepton Mallet	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Shepton Mallet is located within Flood Zone 1 (low risk). A narrow floodplain is located to the north of the settlement, which consist of areas of land located within Flood Zone 2 (medium risk) and Flood Zone 3b (functional floodplain). There are a number of historic flood incidents recorded within the settlement.
Glastonbury		✓ **(F)**	✓	✓	Glastonbury is predominantly located within Flood Zone 1 (low risk). The low lying areas surrounding the settlement are located within Flood Zone 3b (functional floodplain). No historic flood incidents have been recorded throughout the majority of the settlement. There are a number of flood incident occurrences of unknown source recorded to the west of Glastonbury, which are likely to be from fluvial flooding.
Street		✓ **(F)**		✓	The majority of Street is located within Flood Zone 1 (low risk). The low lying land to the north is located within Flood Zone 3b (Functional Floodplain). A single historic flood incident generated from surface water has been recorded.
Frome	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Frome is located in Flood Zone 1 (low risk). Areas of Flood Zone 2 and 3a/b exist in the centre of the town adjacent to the river. A relatively small number of historical events have been recorded.
Bridgwater	✓ **(T)**	✓ **(T)**	✓	✓	Significant areas of Bridgwater are located within Flood Zones 3a (high risk) and 3b (Functional Floodplain). The western side of Bridgwater is predominantly located within Flood Zone 1 (low risk). A number of tidal and fluvial flood

					events have been recorded within the town.
Highbridge / Burnham-on-Sea		✓ **(T)**	✓	✓	The majority of Highbridge/Burnham on Sea is located within Flood Zone 3a (high risk) with smaller areas of Flood Zone 1 (low risk). Areas of Flood Zone 3b (Functional Floodplain) exist adjacent to the mouth of the River Brue. There are a number of tidal and surface water flood incidents recorded within these settlements.
Yeovil	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Yeovil is located within Flood Zone 1 (low risk) with areas of Flood Zone 2 (medium risk) and Flood Zone 3b (Functional Floodplain) adjacent to the minor watercourses that flow through the town. A number of fluvial and surface water flood incidents have been recorded adjacent to the minor watercourses. Isolated groundwater and sewer flood events have also been recorded.
Chard	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Chard is located within Flood Zone 1 (low risk). Land towards the south of the settlement is located within Flood Zone 2 (medium risk) and Flood Zone 3b (Functional Floodplain). A number of groundwater, surface water and sewer flood incidents have been recorded within the settlement. Chard Reservoir located north east of Chard presents a potential flood source. Although the predominant flood risk direction in the event of a breach or overtopping is considered to be to the north east away from Chard.
Crewkerne			✓	✓	The majority of Crewkerne is located within Flood Zone 1 (low risk). A number of surface water flood events have been recorded at locations throughout the town. A number of springs have been identified around the periphery of the settlement. These springs may present a potential flood source.
Wincanton		✓ **(F)**	✓	✓	The majority of Wincanton is located within Flood Zone 1 (low risk). A narrow corridor of land located in Flood Zone 3b (Functional Floodplain) exists adjacent to the watercourse flowing through the town. Two fluvial flood incidents have been recorded. Springs exist in the vicinity of Wincanton. These springs may present a potential flood risk.
Ilminster	✓ **(F)**	✓ **(F)**	✓	✓	The majority of Ilminster is located within Flood Zone 1 (low risk). Areas of land located in Flood Zone 2 (medium risk) and Flood Zone 3b (Functional Floodplain) exist in the north west of the town. Recorded flood incidents within the town are limited. A single surface water flood incident has been recorded towards the east of Ilminster. A sewer flooding incident has also been recorded on the periphery of the settlement.
Minehead	✓ **(T)**	✓ **(T)**	✓	✓	Minehead has land located within Flood Zone 1 (low risk) Flood Zone 2 (medium risk) and Flood Zone 3b (Functional Floodplain). Flood incidents from a number of sources have been recorded within the town. Tidal and fluvial flood incidents have been recorded as occurring outside of the Flood Zone Maps. A number of surface water flooding incidents have also been identified.

Footnotes

[i] The documents and policies summarised are:

- Minerals Policy Statement 1: Planning and Minerals, 2006;
- Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Mineral Extraction in England, 2005;
- Minerals Planning Guidance 2: Applications, Permissions and Conditions, 2006;
- Planning Policy Statement 10: Planning for Sustainable Waste Management, 2005;
- Planning Policy Statement 25: Development and Flood Risk, 2006;
- Planning Policy Statement 25: Development and Flood Risk Practice Guide, 2008;
- Making Space for Water, DEFRA, 2005;
- Future Water: The Government's Water Strategy for England, DEFRA, 2008;
- Somerset and Exmoor National Park Joint Structure Plan Alteration 2011;
- Draft Regional Spatial Strategy (RSS)[i] policies for waste, minerals and flooding, 2004;
- Somerset Minerals Local Plan 1997 – 2011 (adopted 2004); and,
- Somerset Waste Local Plan 2001 – 2011 (adopted 2005).

[ii] Maps have been produced for the following:

- Figure C1 – Study Area Overview and Inset Map Locations
- Maps D1(a - d) – Fluvial and Tidal Zone Maps
- Maps D2 (a – d) – Historic Flood Incidents and Potential Flood Sources
- Maps D3 (a – d) – Flood Defences and Structures
- Minerals Inset Plans 1 – 3
- Inset Plan 4 - Taunton
- Inset Plan 5 - Wellington
- Inset Plan 6 - Wells
- Inset Plan 7 – Shepton Mallet
- Inset Plan 8 - Glastonbury
- Inset Plan 9 - Street
- Inset Plan 10 - Frome
- Inset Plan 11 - Bridgwater
- Inset Plan 12 – Highbridge / Burnham-on-Sea
- Inset Plan 13 - Yeovil
- Inset Plan 14 - Chard
- Inset Plan 15 - Crewkerne
- Inset Plan 16 - Wincanton
- Inset Plan 17 - Ilminster
- Inset Plan 18 - Minehead

[iii] See http://www.environment-agency.gov.uk/homeandleisure/floods/default.aspx

[iv] Although not defined within PPS25, a recent appeal decision by a Planning Inspector supported the view that peat extraction should be considered as water compatible.

[v] (except landfill and hazardous waste facilities)

[vi] (except for sand and gravel working)

[vii] (if adequate pollution control measures are in place)

[viii] (and sites used for waste management facilities for hazardous waste)

[ix] Defined as a zone where there is a less than 0.1% probability of flooding each year

[x] Defined as having between 0.1% and 1% probability of fluvial flooding each year and between 0.1% and 0.5% tidal flooding each year

[xi] Defined as having a 1% or greater probability of fluvial flooding each year and a 0.5% or greater probability of tidal flooding each year

[xii] Defined as land where water has to flow to be stored in times of flood. Defined as the 5% annual probability floodplain or an area designed to flood in extreme (0.1%) flood, or another probability agreed between a Local Planning Authority and the Environment Agency

[xiii] Excluding associated buildings – more vulnerable development types should be located in the lowest available flood zone.

[xiv] Excluding associated buildings – more vulnerable development types should be located in the lowest available flood zone.