The Committee will meet at 10.00 am in the Conference Room, Moray College, Elgin.

1. Flooding and flood management inquiry: The Committee will take evidence from—

   Alvin Barber, Senior Professional Officer (Flood Prevention), City of Edinburgh Council; Sandy Gillon, Environmental Sustainability Manager, Glasgow City Council; Bob Stewart, Director of Environmental Services, Moray Council; Councillor Eddie Phillips and Kathy Cameron, Policy Manager, Convention of Scottish Local Authorities

   and then from—

   Alex Macmillan (Chairman) and Brian Watson, Elgin Community Council; and Jennifer Main, resident of Elgin

   and then from—

   Graeme Archibald, Financial Director, Johnstons of Elgin; Andrew Grzesinski, Group Managing Director, Macrae and Dick Ltd; and Michael Urquhart, Joint Managing Director, Gordon and MacPhail.

2. Subordinate legislation: The Committee will consider the following negative instruments—

   the Bluetongue (Scotland) Order 2008 (SSI 2008/11); and

   the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2008 (SSI 2008/17).

3. Flooding and flood management inquiry (in private): The Committee will consider the evidence heard earlier in the meeting with a view to identifying preliminary conclusions.
The following papers are attached for this meeting:

<table>
<thead>
<tr>
<th>Agenda item 1</th>
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<tbody>
<tr>
<td>Submission by Convention of Scottish Local Authorities</td>
<td>RAE/S3/08/4/1</td>
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<tr>
<td>Submission by Glasgow City Council</td>
<td>RAE/S3/08/4/2</td>
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<tr>
<td>Submission from Moray Council</td>
<td>RAE/S3/08/4/3</td>
</tr>
<tr>
<td>Submission by City of Edinburgh Council</td>
<td>RAE/S3/08/4/4</td>
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<td>Submission by Jennifer Main</td>
<td>RAE/S3/08/4/5</td>
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<tr>
<td>Submission by Scottish Council for Development and Industry</td>
<td>RAE/S3/08/4/6</td>
</tr>
<tr>
<td>Briefing paper (PRIVATE – MEMBERS ONLY)</td>
<td>RAE/S3/08/4/7</td>
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<table>
<thead>
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<tr>
<td>The Bluetongue (Scotland) Order 2008 (SSI/2008/11)</td>
<td>RAE/S3/08/4/8</td>
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<tr>
<td>Letter to the Convener from the Cabinet Secretary for Rural Affairs and the Environment regarding bluetongue</td>
<td>RAE/S3/08/4/9</td>
</tr>
<tr>
<td>The Conservation (Natural Habitats, &amp;c.) Amendment (Scotland) Regulations 2008</td>
<td>RAE/S3/08/4/10</td>
</tr>
<tr>
<td>(Note: The following EU legislation is relevant: Council Directive 92/43/EEC)</td>
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The following papers are attached for information:

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<tr>
<td>Letter from the Convener to the Minister for Environment on flooding evidence given on 6 February</td>
<td>RAE/S3/08/4/11</td>
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<td>Letter from the Minister for the Environment to the Convener on flooding evidence given on 9 January</td>
<td>RAE/S3/08/4/12</td>
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<td>Note by the clerks on the Scottish Government’s consultation on flood risk management</td>
<td>RAE/S3/08/4/13</td>
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<tr>
<td>Note of recent developments within the Committee’s remit</td>
<td>RAE/S3/08/4/14</td>
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<tr>
<td>Minutes of the last meeting</td>
<td>RAE/S3/08/3/M</td>
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The following provides responses to the questions asked. COSLA has taken the opportunity to consult with the Scottish Society of Directors of Planning and the Society of Chief Officers of Transportation in Scotland in framing this submission.

COSLA would be happy to provide oral evidence, if that would be viewed as of use to Committee members. COSLA would also be happy to provide specific comments on the clauses of The Flood Prevention (Scotland) Act 1961 as amended by The Flood Prevention & Land Drainage (Scotland) Act 1997.

Question 1 – What is the potential impact of climate change on the frequency and severity of all types of flooding in Scotland?

Climate, past, present and future is inherently variable. Climate has always been shifting and changing. This means that precise, long range predictions are not possible.

But there is now common acceptance of the detrimental societal impact on the environment. The major detrimental impacts of climate change are likely to be associated with flooding and storms, which disrupt the provision of services. The Committee may therefore wish to consider the following topics when considering this issue:

- Sustainability: Specifically, what does this mean for how local government deals with flood prevention, and how achievable is it;
- Technology v. behaviour: How dependent should society be on a technology based solution, as opposed to achieving emission reductions through behavioural change;
- Adaptation and mitigation: Should our focus be on both adaptation to life in the possible future climates and to mitigate its effects;
- Contraction and convergence: Local government has a role in delivering emission contraction. Should we have a role in stating, or informing, international convergence targets;
- The role of the market: Has the market now woken up to the challenge, or can local government do more to encourage further activity, and
- National guidance is needed on the predicted effect of climate change and the design standards to be adopted, while accepting that this may require to be amended from time to time as knowledge and experience of this effect in Scotland is gained.
Question 2 – What changes are needed to the existing legislation?

General

There is a public perception that the local authority is responsible for dealing with all matters relating to flooding. This should be clarified to demonstrate that the primary responsibility for flood mitigation lies with the property/landowner. Similarly with respect to watercourses the primary responsibility for maintenance lies with the riparian landowners.

The Acts talk about flood “prevention” but “prevention” is not possible. The best that can be achieved is reduction in the risk of flooding or “mitigation”. This should be reflected in the proposed legislation.

A greater emphasis from the Scottish government on the need for flood defences would be welcomed especially in situations where a few individuals can stop a scheme that will protect many. Further efforts should be made at legislative level to streamline the bureaucracy in developing flood prevention schemes, especially (but not exclusively) at economic evaluation stages.

It is not clear to us whether amendments to the existing legislation will be sufficient to address both the transposition of the EU Floods Directive as well as provide sufficient enabling powers to local authorities to deal with flood risk in the future, especially in view of climate change issues.

Key Issues

Design Standards
Local authorities in seeking design parameters for the production of a flood mitigation scheme note the inconsistency between the design criteria for Flood Prevention Schemes (ideally 0.5% Annual Exceedance Probability [AEP]) and that for Sustainable Urban Drainage Systems (SUDS) (in Sewers for Scotland 2 – 3.33%AEP). A freeboard to the flood design level of at least 500mm for embankments and 600mm for walls is needed. The scheme should be almost completely designed prior to applying for confirmation. Finally, a methodology for the cost benefit analysis should be specified by the Scottish Government and take account of intangibles and climate change.

Funding and Resources
The incorporation of the Flood Alleviation Grant monies in the Spending Review distribution to local authorities means that all costs will fall on them. The distribution formula is the subject of negotiation along with wider distribution issues between the Scottish Government and COSLA, based on the Concordat agreed by both parties.

One particular issue, among others that we would wish to draw to the attention of the Committee is the financial burden being placed on local authorities in respect of nature conservation matters. For example, finding a salmon par in a burn in one local authority area increased estimates of a flood prevention scheme by £750,000, since that limited the time during which
engineering work could take place. This serves to illustrate the need for reduction in separate processes required to allow councils to progress flood prevention schemes more efficiently and cost effectively.

Until recently there has been a difference in standards between Government Guidance (1 in 200 protection) and what the Scottish Government would support financially (1 in 100). This apart, SEPA are insisting that before sites are designated in vulnerable areas there should be Flood Risk Assessments (FRAs). Although we recognise that FRAs may be required through the transposed EU Floods Directive, this already places costs on Local Authorities rather than developers. Examples can be found in Local Plan Inquiries in North East Scotland.

Flood Alleviation also creates demands to deal with contaminated land adjacent to rivers. Here too there are skill shortages. Funding issues for Local Authorities could be considerable.

The increasing number of large projects such as Olympic and Commonwealth games and similar, as well as more Local Authorities undertaking flood alleviation work, increases the demand for skilled engineers and project managers both in local government and consultancies. We have to make best use of what we staffing resources available. A combined form of consent which reduces duplication would do just that.

Additional Comments

A view needs to be taken whether related primary and secondary legislation needs to be updated and/or rationalised to give powers to deal with all forms of flooding, for example:

- The Coast Protection Act 1949;
- Water Environment and Water Services Act 2005;
- Roads (Scotland) Act 1984, and
- Scottish Water Sewage (Scotland) Act 1968.

In addition, at the moment, there are no clear responsibilities identified in legislation in respect of pluvial/overland flooding

Civil Contingencies and Emergency Planning

Any new legislation needs to tie in with ‘first responder’ duties under Civil Contingencies Act (CCA). Powers and duties relating to the response to flooding incidents are patchy. At the moment, the Fire and Rescue Service have a duty to respond, however it is not clear that local authorities have a duty to respond except under CCA.

There is also the issue of sandbag provision; once used, especially when flood water is contaminated by sewage, sand bags are hazardous waste and can not be disposed of in most landfill sites. Equally, sandbags are not watertight.
Any new powers and duties placed on Councils in this regard must be accompanied by funding to allow them to be undertaken.

The overall standard/quality of flood incident reporting could be improved upon. We would recommend to the Committee the reading of the SNIFFER Project FRM07 on Development of a methodology (and identification of responsible parties) for capturing information and relevant data after a flood event in Scotland (http://www.sniffer.org.uk/exe/download.asp?sniffer_outputs/FRM07.pdf)

Flooding Issues Advisory Committee

The Flooding Issues Advisory Committee, whose final report was issued earlier this year (FIAC Final Report - FIAC2007(4)) made a range of recommendations through each its three sub committees. Among those recommendations, the following stand out in particular:

- Current work on raising awareness of flooding in Scotland, including information from the flood map, the asset data base and SNIFFER, needs to be collated and held centrally to avoid duplication of work and to learn from best practice.
- Any future national Flood Issues Advisory Committee must engage with the Scottish Buildings Standards Agency to fully consider the role building standards can play in increasing resilience to flooding both in future developments and existing building schemes.
- Local authorities and SEPA need to be aware of sites where there is the potential for the type of flooding incidents that might pose a risk to life. SEPA should use links with civil contingency plans to help make communities and emergency services aware of these risks.
- A scoping study should be carried out to determine how flood warning can be delivered to specific at-risk coastal communities.
- Public bodies and academia work together to ensure that there are suitably qualified hydrologists to support future flood risk management programmes.
- The timelines and key decisions of integrating polices set out in the Catchment Strategy Planning paper (Annex C of the Avoidance Sub-Committee report) are drawn out and recommend a forum be set up for key stakeholders to continue their work in this area.
- Further detailed work to link catchment strategic planning and the River Basin Management Planning process should be carried out and the outcomes addressed in a public consultation on new flooding legislation.
- The Scottish Executive must maintain a position to keep up to date, learn from, act on and support exemplar projects and good practice in the UK, Europe and beyond, which are examining land management techniques, and their possible role in sustainable flood management.
- Reducing the risk of flood damage should be an objective of rural policy in Scotland and the Scottish Executive should seek to promote rural land use solutions as part of its strategy for flood risk management.
- All stakeholders with an interest in the new SUDS approach in Scotland to take part in this consultation and provide feedback and comments.
- The Scottish Executive should seek advice on how best to present the technical guidance to stakeholders, perhaps by rolling it out to practitioners through a series of workshops.
- The Scottish Executive should take forward the option for streamlining the flood prevention and planning processes whereby confirmation of a flood prevention scheme and granting of planning permission could happen at the same time.

COSLA notes that these recommendations were made prior to the Scottish Parliament elections, therefore the references to the Scottish Executive are appropriate.

**Question 3 – Who should be responsible for flood management and how should it be funded?**

The Scottish Government should support strategic partnerships in flooding issues working with local authorities and other bodies. We are already aware that there is examination of how joint working at catchment level could make better use of resources across council boundaries and ensure that flood prevention measures do not risk negative impact downstream of the mitigated area.

Councils should continue to deliver flood prevention and coast protection duties, but strategic support should be improved and revenue funding for councils should be available through future Spending Reviews to allow them to continue to carry out their duties.

**Question 4 – What role should sustainable flood management play in mitigating the effects of flooding?**

Sustainable flood management can mean:

- A strategic, catchment based approach based on sound information;
- Protecting and using natural systems, particularly wetlands;
- Promoting soft engineering techniques;
- Not developing on flood plains (Scottish Planning Policy (SPP)7);
- Embracing SUDS.

All of the above should be adopted where viable to mitigate the effects of flooding. However, sustainable flood management is only one aspect of flood prevention. Hard infrastructure is still needed especially given the magnitude and immediacy of flood risk in recognised parts of Scotland.
Question 5 – What role can land use management, the planning system and building regulations play mitigating the effects of flooding?

SEPA’s role should be reviewed and expanded in respect of flood data and advice to councils. SEPA should consider the following on a national basis where already not provided;

- The provision of information on hazards (flood prone areas, flood depth, erosion etc);
- Develop and establish advanced tools for emergency management;
- Transfer this information to all interested stakeholders.

It is important that local authorities identify in their Structure/Local Plans areas of land that can be developed in accordance with SPP7. But care has to be taken in reaching a balanced approach to this issue, since by placing more control on development could lead to a prevention of new development at a point where Scottish Ministers are seeking housing growth, especially in affordable housing growth.

Local Authorities could provide common guidance to developers on the following:

- SUDS and watercourse enhancement techniques (treatment at source);
- Design parameters to control surface water run off, including overland flow;
- Prohibit use of culverts (unless necessary, under roads for example);
- Encourage developers to make watercourses a feature of developments.

Although we are aware that Ministers will no longer issue final approval of flood prevention orders, Ministerial approval comes in several guises. If there is one objection to a FPO the issue goes to a Public Inquiry. The Planning Consent allows a more flexible approach by Authorities. We appreciate that the FPO gives Authorities the right to enter land and carry out works without a Compulsory Purchase Order and people must have their say but we could argue that the case should go to Written Submissions if there are outstanding objections. This could cut decision time drastically.

There is the added challenge of Controlled Activities Regulations (CARS). A scheme could be well advanced and have both a Flood Prevention Order (FPOs) and Planning Permission but be substantially delayed or, prevented by SEPA’s treatment of the CARS licences. SEPA’s role here should be clarified. Currently neither SNH nor SEPA are required to assist in the development of FPOs. There is no legislative requirement for them to do so. Given the narrow focus of their interests, this leads to problems arising between Local Authority and agency. It would useful to move to a position where the development of a scheme is done with SEPA’s involvement and one consent covering FPO, planning permission and any CARS licences. If there is a departure from the Development Plan, Ministers would also approve
the Planning Application. Also, under the current system, for CARS licenses
SEPA gives consent within 4 months or there is a deemed refusal. Any
appeal is to the Minister. We understand that that is the same Minister that
would have previously given consent for an FPO.

**Question 6 – Are there any improvements needed to existing flood
warning systems?**

SEPA are the flood warning authority in Scotland and through Floodline
provide flood alerts to Floodline customers. Efforts have been made by SEPA
to extend the range of their flood warning dissemination system and find a
more effective means do carry out this role with the aid of new technology.
More proactive warnings, with more accurate geographic location would help.
The current Met. Office warnings can be too vague and can cover larger
areas than necessary, with the result that they may not always be acted upon
properly. Notwithstanding this, all stakeholders should be more proactive in
dealing with flood events and in communicating their role and in providing
information to the public through local authority Emergency Planning Officers.

**Question 7 – How effective are the responses to flood events?**

Some authorities in Scotland have a dedicated Flood Response Plan which
provides a structure for an inter-agency response to a flood emergency.

The general objectives of such plans are:
- To develop a corporate and co-ordinated response to flooding incidents
  and mitigation measures;
- To develop and produce proactive contingency measures for dealing
  with flooding affecting council property, non-council property
  (commercial and residential), transport routes, villages isolated by flood
  waters and care of the displaced;
- To provide recognised and agreed procedures for obtaining assistance
  from Central Government, the military forces and any other
  organisations.

These plans are generally tested at least once. However, consideration
should be given to having a template of such plans to ensure good practice is
adopted by all authorities in Scotland. In addition, all councils with a coastline
should prepare Shoreline Management Plans to help plan and manage the
coast, and to help prevent unforeseen coastal flooding. Additional resources
to do this will be needed. COSLA may consider seeking these through future
Spending Review negotiations.

COSLA
12 December 2007
The following provides the Glasgow City Council’s response to the questions, raised by the Rural Affairs and Environment Committee, relating to the future approach to sustainable flood management.

What is the potential impact of climate change on the frequency and severity of all types of flooding in Scotland?

Informed research advises that the West of Scotland will become wetter and stormier. Rainfall will become more intense and more frequent. Return periods for the most severe storms will reduce while the frequency and magnitude of tidal surges as well as sea levels will rise.

At present, drainage infrastructure, i.e. sewerage and watercourse systems, have suffered from over a century of industrialisation and urbanisation and are now struggling to cope with the demands of the 21st century. Capacity to accommodate continuing regeneration and growth in urban areas is no longer available. Already the environmental damage being done by flooding and Combined Sewer Overflows discharges is beyond acceptable limits and European legislation is demanding that action be taken.

Against this backdrop the potential increased flows in sewers, watercourses and overland will remove surplus capacity more quickly and result in earlier, more severe flooding.

What changes are needed to the existing legislation?

Urban flooding is a complex problem with flows from a range of sources combining to create a complicated challenge for engineers and planners. Addressing this requires a composite solution developed through a partnership approach. At present the various bodies and agencies require to progress such solutions through a range of legislative instruments, such as:

- Town and Country Planning (Scotland) Act
- Flood Prevention and Land Drainage (Scotland) Act, 1997
- Water Environment and Water Services Act
- Controlled Activities Regulations
- Roads (Scotland) Act, 1984

Each of these has its specific procedure and timescales and, in some cases, conflicting requirements. In addition funding mechanisms, such as the Q&S III process and flood prevention grant assistance is closely linked to the successful conclusion of these procedures.
An integrated approach to flood management is now necessary to address urban flooding. At present, Scottish Water in addressing the Water Industry Commissioner’s objectives for dealing with sewer flooding will develop its business case in less than two years. In comparison, local authorities can take 6 to 8 years to bring forward a flood prevention scheme to manage watercourse flooding. The picture is further complicated through the use of different design standard – Scottish Water currently work to 1 in 30 year while flood prevention schemes are required to deal with 1 in 100 events. It is essential that the various legislative and funding mechanisms are harmonised to remove ambiguities, outdated standards and procedures.

Delivery of an integrated flood management solution will require to utilise the planning system to provide significant elements such a Sustainable Urban Drainage Schemes. It is essential, therefore, that local authority development plans and strategies recognise the spatial planning needs of such solutions and are required to contain policies, standards and guidance to ensure that the physical and design requirements of dealing with overland flow and Sustainable Urban Drainage Systems can be incorporated into the essential, i.e. long-term, infrastructure of urban areas.

Flood management legislation requires, therefore, to create and support a more streamlined and collaborative approach to integrated solutions. The creation of a Strategic Drainage Plan, identifying the flood management needs and bringing together the various solution elements, as currently being developed in Glasgow, through the Metropolitan Glasgow Strategic Drainage Plan, will be a central tool in developing, delivering and managing effective flood management. The objectives of such a plan would be:

- Remove flooding
- Improve water quality
- Integrate investment
- Promote positive land-use
- Asset management

It is essential that once in place a Strategic Drainage Plan has a clear and consistent maintenance regime. At present this is the responsibility of Scottish Water. Sustainable Urban Drainage Systems will be a major element of a Strategic Drainage Plan. Currently, the design and adoption standards of these systems are set out in Sewers for Scotland 2. These standards, however, are “land hungry” not suited to dense urban development. A reconsideration of the standards for such areas may be required if the creation of private and potentially poorly maintained systems are to be avoided.

Cost-Benefit criteria for the funding of solutions to deal with urban flooding will be very difficult to achieve under the current calculation requirements. The complexities and expense of putting defences in place measured against the benefits presently considered will result in few urban flood prevention schemes obtaining grant funding. There is a need, therefore, to review this
process with consideration being given to the inclusion of social benefits, etc. being included in the calculations.

Under the current situation a developer can use any capacity created in the sewer system regardless of whether they contributed to the creation of that capacity or not. As such one developer’s contribution can be utilised to subsidise and unlock drainage capacity for another. This requires to be addressed if a significant brake on private sector investment in infrastructure is to be avoided. A mechanism for calculating, and managing developer contributions to infrastructure improvements requires to be developed.

**Who should be responsible for flood management and how should it be funded?**

As outlined above the key document in the delivery of sustainable flood management is a Strategic Drainage Plan. To ensure integration of priorities, programmes and funding it will be necessary for “buy-in” by all the stakeholders to be achieved. The management, co-ordination and delivery of the Plan will require, therefore, to be directed through a Strategic Drainage Board comprising high level representation from each of the stakeholders. Due to the importance of the planning process in the delivery of such Plans the local authority should manage, chair and administer the Board.

River Basin Management Plans (RBMPs), however, are being developed to promote the partnership and early integration of policy areas which will influence the protection and enhancement of water bodies in response to the Water Environment and Water Services Act. A key function of RBMPs is to identify programmes of measures and delivery mechanisms. Their synergy with the objectives of a strategic drainage approach is clear and, as such, management linkages between the two processes require to be established.

Creation of statutory drainage plans will allow easier prioritisation, planning and integration of all funding sources. This will result in a more effective and efficient use of the available resources. Currently, however, no specific funding exists to establish, develop, manage and maintain this strategic approach. Consideration must be given, therefore to “top slicing” existing funds to provide the necessary resources.

Linking the Drainage Plan to development plans will also provide a certainty for developers and allow a structure and controlled approach to developer contributions to be established.

**What role should sustainable flood management play in mitigating flooding events?**

Sustainability in flood management is essential. With the uncertainty of climate change dealing with the unknown increase in rainfall intensity and frequency demands responses that are flexible and responsive to future demands.
At the same time any approach to flood management requires to recognise and support wider strategic objectives. It is important that planning for flooding is fundamentally linked to issues such as access, water quality, greenspace, biodiversity and sustainable transport. A Strategic Drainage Plan can provide the focus to identify the potential synergies with other policy initiatives and assist in the development and delivery of an effective, co-ordinated programme of measures.

What role can land-use management, the planning system and building regulations play in mitigating the effects of flooding?

The Planning process will be central to delivering a strategic approach to sustainable flood management. It is important to recognise that land form will be a key consideration in spatial planning; low lying land is often fixed and in existing built up areas can not be changed. It may have to be treated as a resource – like transport solums - to be protected in physical planning terms. As such Development Plans require to include policies, standards and guidance to ensure that the physical and design requirements of dealing with overland flow and on-site and off-site SUDS can be effectively incorporated into the essential, i.e. long-term, infrastructure of urban areas.

There is also a need for micro-management of new development in association with reducing flood risk and directing overland flow, i.e. through design and other requirements influencing and controlling the location, construction methods and materials used for fences, walls, kerbs etc. This will have significant implications for permitted development rights and Building Control standards.

New developments in an area of flood risk from any source should be supplied by services and built of materials resistant to damage by flooding

Are there improvements needed to existing flood warning systems?

Flood Warning Systems require to compliment and support any overall strategic approach to flood management. Such systems are an integral part of flood management and must not be seen as an “add on” or “last resort” option. Consequently, SEPA, as the authority responsible for this area, requires to be a key partner in the development and management of a Strategic Drainage Plan.

Understanding of the threat from fluvial flooding is well developed. Determining the areas at risk from urban flooding and establishing appropriate responses is, however, a complex task requiring input from all stakeholders. Identification of hot-spots and high risk areas, flooding mechanisms and clear responsibilities can be clearly defined and form an effective response to potential flooding threats.
How effective are the responses to flooding events?

Flooding events can come from various sources – watercourses, sewers, overland flow. Each are the responsibility of a different organisation – or in the case of overland flow outwith anyone’s responsibility. This can lead to confusion and delayed response in dealing with events with the consequence of increased damage and disruption.

Effective flood management requires clear definition of responsibilities and a development of an agreed integrated approach.

Glasgow City Council
16 November 2007
Document 1: Rothes Flood Alleviation Costs Summary

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Total Costs £4,998,360.23

The costs of printing and postage for the FPO and Planning Application documents are included above. For FPO 161 addresses. For Planning Application 181 addresses.
Document 2: Rothes Flood Alleviation Scheme – Scheme Development

**Agenda item 1**

- Flooding – November 2002
- **1st Public Exhibition in Rothes March 2003**

- Scoping of Options Report (MFAG087) May 2003
- **Value Management Workshop (Council & statutory consultees SEPA, SNH etc) August 2003**

- **2nd Public Exhibition in Rothes September 2003**

- Phase 1 Callout (MFAG093) September 2003
- **Draft Appraisal Report January 2004**

- **3rd Public Exhibition in Rothes April 2004**

- Summary Report sent to Consultees April 2004

- **Strategy Recommendation (MFA 200) August 2004**

- Channel works strategy development

- **Option Evaluation Report (MFA 261) June 2005**

- **Rothes Appraisal Report (MFA 287) September 2005**

- **4th Public Exhibition in Rothes**

- Design Stage 1 Report (MFAG351) and drawings September 2006

- **Rothes FAS Technical Report & Investment Appraisal**

- Final Flood Prevention Scheme 2008 Submission
- IFO Submission drawings
- Submission to Scottish Executive
Agenda item 1
Planning Application
February 2007
Planning Approval
August 2007
CAR Licence Application
Package 1 Back Burn
December 2007
Works Information
Package 1 Back Burn
February 2008
Compensation Event Quotation
Submission
April 2008
Council Approval and Grant Aid
June 2008
Discharge Planning Conditions
June 2008
Construction Start
Package 1 Back Burn
July 2008
5th Public Exhibition in Rothes
December 2006
Application Forms:
•A, D & E
•Engineering Registration Form
•Activity Reference Table
•Justification for Activity:
•Rothes Final Recommendation Report (MFAG200)
•Alternative Approaches:
•Appraisal Report (MFAG282)
•Rothes FAS – Design Stage 1 Report (MFAG351)
•Selected Approach:
•Rothes Option Evaluation Criteria Report (MFAG261)
•Black Burn Option Report (MFAG263)
•Black Burn Setback Cost Risk Report (MFAG270)
•Black Burn Constrained Cost Risk Report (MFAG271)
•Black Burn Combined Cost Risk Report (MFAG272)
•Rothes Working Groups Evaluation Report (MFAG216)
•Additional Information required:
•Drawings: Site plans, Target Setting Drawings, service drawings & schedule
•Photo survey
•Method statements (generic and construction)
•Existing engineering works
•Flood risk investigation and maps
•Hydrology
•Geomorphology
•Geology
•Climate change
•Environmental statement & environmental action plan
•Correspondence
•Operation and maintenance
•Justification of environmental service
•Environmental statement;
•Background to flooding problem
•Option appraisal
•Scheme development
•Proposed scheme
•Environmental impact assessment process
•Land use and local community
•Policy and plans
•Hydrology and water quality
•Geology and soils
•Geomorphology
•Nature conservation designated sites
•Habitats and species
•Cultural heritage
•Landscape and visual impact
•Recreation and amenity
•Traffic and access
•Noise and vibration
•Air quality
•Conclusions
•Additional information required:
•Drawing: Site plans, target setting drawings, service drawings & schedule
•Photo survey
•Method statements (generic and construction)
•Existing engineering works
•Flood risk investigation and maps
•Hydrology
•Geomorphology
•Geology
•Climate change
•Environmental statement & environmental action plan
•Correspondence
•Operation and maintenance
•Justification of environmental service
•Environmental statement;
•Background to flooding problem
•Option appraisal
•Scheme development
•Proposed scheme
•Environmental impact assessment process
•Land use and local community
•Policy and plans
•Hydrology and water quality
•Geology and soils
•Geomorphology
•Nature conservation designated sites
•Habitats and species
•Cultural heritage
•Landscape and visual impact
•Recreation and amenity
•Traffic and access
•Noise and vibration
•Air quality
•Conclusions
•Note: Everything below the dotted line is repeated for Package 2 (Black Burn) and Package 3 (Burn of Rothes).
Document 4: Memo to the Director of Environment Services, Moray Council re Rothes timescales

Consultation & Risk Management

The benefits of effective timely consultation are far beyond simply meeting the requirements of legislation and ensuring good practice. Consultation manages risk, reduces surprises and helps to avoid programme delays and increased project costs. Investment up front reduces the risk of a Public Inquiry or should a PI be called consultation will have focused efforts on tackling key issues.

We have invested time and effort in bringing the consultees and stakeholders along with the project development. This has assisted them in being able to react from position of being well informed rather than taking precautionary principle approach when they are consulted as part of the statutory process. We have ensured that consultation has been timely and has struck the right balance i.e. not too much.

We have consulted through a number of methods, including the following:

- Stakeholder Groups and Workshops
- Site visits
- Meetings (and informal discussions) throughout scheme development
- Sustainability Assessments
- Environmental Design Guidance CD
Consultation has been an integral part of the scheme development and has predominantly involved the following organisations:

- SEPA
- SNH
- Spey District Fishery Board
- Aberdeenshire Council Archaeology Service (provide service to The Moray Council)
- Historic Scotland
- The Moray Council (planning, contaminated land, environmental health (noise) etc)

Environmental Impact Assessment (EIA)

The first ecological surveys of the Rothes area for the purposes of feasibility were undertaken in 2003. Since then a significant number of surveys for all aspects of the environment (e.g. ecological, archaeological) have been carried out to assist design decisions and create a baseline to inform the EIA. The EIA was started in March 2006 and was submitted as part of the planning application to the Moray Council in March 2007. The EIA process also included consultation to ensure that we were focussing the assessment on the key environmental parameters likely to be affected by the construction and operation of the scheme.

After Planning and FPO

There are still many consents and approvals to obtain after the approval of FPO and Planning. These include:

- Continued Consultation to manage risk
- CAR Application for Engineering Licence from SEPA (see below for more detail); and
- Other licences and permissions (e.g. Licence to disturb European protected species e.g. otter, bat)
- Construction Methodologies, Sediment Management Plan, Waste Management Plan to be approved by SEPA and SNH as a planning condition;
- Dealing with planning enquiries and conditions.
- Environmental input to the Specification to ensure that mitigation measures are carried through to the construction and implementation of the scheme.

CAR Application

The CAR application for the Back Burn was submitted to SEPA in late December 2007. The wording from SEPA for the notices was sent to Peter Haslam (TMC) in late January 2008 and adverts posted in Edinburgh Gazette and Northern Scot. There is a four week period of representation which starts once the adverts are posted. Once this period has ceased a four month statutory period for determination commences. If SEPA require further information during this period the 'clock stops', therefore the period of determination could be longer than the stated four months.
**Document 5: Flood Prevention Scheme documentation**

**Document 6: Summary of consultees for Rothes flood prevention scheme**

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Letter</th>
<th>Date Printed</th>
<th>Date of Expiry</th>
<th>Date Reply Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 - Environmental Protection C04</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>18.04.2007</td>
</tr>
<tr>
<td>05 - Environmental Health C12</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>03.05.2007</td>
</tr>
<tr>
<td>06A - Estates C25</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>03.05.2007</td>
</tr>
<tr>
<td>107 - Moray Council Other Depts C23</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>02.07.2007</td>
</tr>
<tr>
<td>07 - Transportation Manager C01 / PE - C1</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>09.04.2007</td>
</tr>
<tr>
<td>103A - Dev Cont Community Services - I</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>19.04.2007</td>
</tr>
<tr>
<td>103G - Dev Cont Leisure Officer - N Goo</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>14.05.2007</td>
</tr>
<tr>
<td>05A - Contaminated Land</td>
<td>E01 - Environmental Impact Assess - Me</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>14.05.2007</td>
</tr>
<tr>
<td>30A - Scottish Natural Heritage (CSAC) C02</td>
<td>E02 - Environmental Impact Assess - Let</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>03.05.2007</td>
</tr>
<tr>
<td>95 - Regional Archeologist C01</td>
<td>E02 - Environmental Impact Assess - Let</td>
<td>30.03.2007</td>
<td>13.04.2007</td>
<td>05.06.2007</td>
</tr>
</tbody>
</table>
The Council position regarding Flood Alleviation Schemes for Lhanbryde, Elgin, Forres and Rothes has for some time been as follows. The Council has committed to the development of the schemes up to the flood prevention order stage and has recognized that the costs incurred in getting to that stage are at the Council's risk. To date, there has been no financial restriction on developing schemes for submission to the Scottish Government for a Flood Prevention Order. Once a Flood Prevention Order has been approved, the Council was guaranteed to receive 80% grant of eligible costs. The Council's longer term financial planning arrangements have for some time been influenced by the need to deliver the Flood Alleviation Schemes and therefore also by the 80% grant funding model.

The Capital Grant for Flood Alleviation Schemes has been included by the Government as a former ring-fenced grant. For the next three years, this results in the Council receiving Capital Grants as follows:

<table>
<thead>
<tr>
<th>£m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Grant 2008/09  14.4</td>
</tr>
<tr>
<td>Capital Grant 2009/10  22.9</td>
</tr>
<tr>
<td>Capital Grant 2010/11  19.7</td>
</tr>
<tr>
<td><strong>Total</strong>       57</td>
</tr>
</tbody>
</table>

The single Capital Grant replaces the following former grants:

Flood Alleviation Schemes  
Strategic Waste Fund  
Contaminated Land  
Regional Transport Partnerships  
Public Transport and Integrated Transport  
Schools Fund

The Council has been advised informally that around £40 million of the Capital Grant relates to Flood Alleviation Schemes. As can be seen from Appendix 7 (see over) this is £23 million less than the Council would have received based on the expenditure profile which assumes that the Elgin and Pilmuir Schemes will be the subject of Public Inquiries.

Appendix 7 provides members with an overview of the Flood Alleviation Schemes for the next six years. If the Scottish Government does intend to continue to support these Schemes with grant funding of 80% then the Capital Grant will need to increase substantially for the three years commencing 2011/12. The Convener has written to the local MSP to ask for a view on likely future funding levels for Flood Alleviation Schemes. The response to this letter will be of fundamental importance for the Council in this key area of the Financial Plan.
## Moray Flood Alleviation Schemes

### APPENDIX 7

Estimated Expenditure

<table>
<thead>
<tr>
<th></th>
<th>To end March 07</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>Total for Future Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elgin</td>
<td>5.3</td>
<td>3.5</td>
<td>2.6</td>
<td>2.0</td>
<td>17.0</td>
<td>20.0</td>
<td>20.0</td>
<td>13.1</td>
<td>78.2</td>
</tr>
<tr>
<td>Forres (Burn of Mosset)</td>
<td>3.6</td>
<td>2.0</td>
<td>9.1</td>
<td>5.5</td>
<td>1.0</td>
<td>0.0</td>
<td></td>
<td></td>
<td>17.6</td>
</tr>
<tr>
<td>Forres (Findhorn &amp; Pilmuir)</td>
<td>1</td>
<td>1.3</td>
<td>1.2</td>
<td>1.0</td>
<td>8.8</td>
<td>8.1</td>
<td>8.0</td>
<td></td>
<td>17.8</td>
</tr>
<tr>
<td>Rothes</td>
<td>2.8</td>
<td>1.6</td>
<td>4.0</td>
<td>5.7</td>
<td>5.0</td>
<td>1.2</td>
<td></td>
<td></td>
<td>17.5</td>
</tr>
<tr>
<td>Total</td>
<td>12.7</td>
<td>8.4</td>
<td>16.9</td>
<td>14.2</td>
<td>31.8</td>
<td>29.3</td>
<td>28.0</td>
<td>13.1</td>
<td>141.7</td>
</tr>
</tbody>
</table>

Funded by:

- Grant (note 1 below): 0
- Capital Fund (note 2 belc): 8.0
- Borrowing: 4.7

Total: 12.7

### Grant Figures 2011/12 to 2013/14 to balance total grant to 80%

Comparison With 80% Grant Funding

<table>
<thead>
<tr>
<th></th>
<th>To end March 08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>Total for Future Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elgin</td>
<td>24.3</td>
<td>16.0</td>
<td>16.0</td>
<td>10.5</td>
<td>68.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forres (Burn of Mosset)</td>
<td>4.5</td>
<td>7.3</td>
<td>4.4</td>
<td>0.8</td>
<td>0.0</td>
<td></td>
<td></td>
<td>17.0</td>
</tr>
<tr>
<td>Forres (Findhorn &amp; Pilmuir)</td>
<td>3.6</td>
<td>7.0</td>
<td>6.5</td>
<td>6.4</td>
<td>23.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rothes</td>
<td>6.7</td>
<td>4.6</td>
<td>4.0</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td>16.2</td>
</tr>
<tr>
<td>Total</td>
<td>4.6</td>
<td>14.0</td>
<td>12.6</td>
<td>36.2</td>
<td>23.4</td>
<td>22.4</td>
<td>10.5</td>
<td>123.5</td>
</tr>
</tbody>
</table>

Grant Difference between 80% and new arrangements

|                | -1.0            | -5.3    | 3.4     | -21.2   | 3.4     | 4.4     | 16.2    | 0.0                 |

Shortfall between 2008/09 and 2010/11 £23M

Notes:
1. Grant figures for 2011/12 to 2013/14 have been calculated on the basis that the Government contributes 80% to the cost of the schemes.
2. As at 31.3.08 Capital Fund is expected to be £3.6 million - subject to receipt of £3.5 million grant by that date.
3. The above expenditure profile is for illustrative purposes and is based on a Flood Prevention Order being granted for Elgin in Spring 2010 and for Pilmuir in Spring 2009.
On behalf of the City of Edinburgh Council, I wish to submit the following written evidence to the above inquiry. The evidence takes the form of responses to the seven questions described in your call for evidence.

Q1 What is the potential impact of climate change on the frequency and severity of all types of flooding in Scotland?

There is considerable variation in the effects forecast by models, but current models appear to forecast an increased risk of severe events in winter. There does not appear to be a general forecast of increased annual rainfall; the increased winter rainfall being offset by lower summer rainfall. It is accepted that it will be many years before the period of records is sufficient to prove that predictions made about rainfall as a result of climate change is, or is not, occurring. Therefore it is necessary to rely on the predictive models, and the precautionary principle would dictate that action be taken on two fronts

- Reduce the effects by reducing the human influences, i.e. by reducing greenhouse gas emissions.
- Plan for an increase in the frequency and effects of flooding.

Both are already underway. There are so many serious consequences of climate change that reducing greenhouse gas emission must be a priority worldwide.

With respect to flooding: there are 2 main standards to apply - the standard for new development, and the standard for flood protection to existing buildings.

Standards for both have increased in the last 20 years, not because of climate change, but because of other factors, principally:

- A series of serious flood events in Europe
- Increased cost of flood damage
- An increased awareness of flooding and preventative measures

The increased cost of flood damage has not just been due to frequency but due to the nature of damage. Building construction is more vulnerable due to use of materials such as chipboard, and the huge increase in electrical goods of high vulnerability as well as value. The importance of insurance to mortgages and increased home ownership have all been an influence.

There is also a greater perception that flooding is something that is not acceptable and that there is a public duty to prevent it. Climate change is not the most important factor in the adoption of higher standards, and the line taken in SPP7 is valid. However it is important that the potential effects are identified and incorporated into design standards. In practice this does not necessarily mean always assuming a worst case scenario – it depends on the situation.
For instance, the variation in fluvial flood levels for different climate change scenarios may be lower than the variation allowing for uncertainty in the estimated design flow. For coastal flooding the impact of climate change will be felt more in still water sea levels than in weather extremes. The variation for different climate change scenarios, particularly taking polar ice cap melt into account is likely to be more significant. It is suggested that research into clarifying the likely sea level rise should be the priority. While it appears to be difficult to predict the linkage between greenhouse gas levels and ice melt, it should be easier to link sea levels to ice melt. The best/worst case scenarios should therefore be based on ice melt and thermal expansion. The choice of what scenario to use must still be made on site specific criteria such as land use and topography.

If there is an increased risk of extreme summer rainfall (thunderstorms) the local effects would be much less predictable than other types of flooding. Scotland is probably less prepared for such events than the south where the risk has historically been greater (but may also be increasing). A response would require local knowledge but a lot can be done if the effects are anticipated.

**Q2 What changes are needed to the existing legislation?**

The main fault in the existing legislation is the provision for promoting a Flood Prevention Scheme (FPS), which gives rise to delays that are generally seen to be unacceptable. This causes frustration especially where the work required to improve flood protection is actually not extensive.

The main cause of the delays appears to be the time taken in public inquiries. These delays arise due to:

1. Negotiating over objections prior to deciding on holding an inquiry (Local Authorities (LA's) and Scottish Government (Scottish Gov))
2. Waiting for the inquiry to be organised (Scottish Gov)
3. Waiting for the reporter’s decision (Scottish Gov)
4. Waiting for the Minister’s decision on confirmation (Scottish Parliament)
5. The potential for a legal challenge (legal requirement)

The inquiry itself is rarely very long but the reliance on legal counsel does put a division between those that can afford legal representation and those who cannot. It also puts the legal arguments above the technical ones, and legal advice is generally more expensive than technical advice in the form of an expert witness.

Is a public inquiry the best way of determining objections?

In discussing this at the FIAC committee, the advice was that a public inquiry must be part of the protection for the public interest. This is an appropriate method of determining the issues where there are well argued and reasonable objections. However for small schemes there may be a point where a public inquiry is seen as excessive. Is the answer to:

- have a simpler system for smaller schemes,
- allow minor defences to be built without a scheme
- or just to remove the requirement for a public inquiry?
It is recommended that one method should apply to all Schemes. Two changes are suggested:

(a) Amending the Flood Prevention (Scotland) Act 1961 so that small scale work which exceeds “repair and maintenance” can be carried out by Local Authorities without the need for a FPS. There is certainly no clear agreement at present over just what can be done without promoting a formal FPS. The Local Authority should only require a FPS where they wish to apply for funding from the Scottish Government. There would be safeguards in that any proposal would require a Controlled Activities Regulation (CAR) licence – SEPA would have the right to insist on advertisement, and could ensure that no work which would, for instance, increase flood risk elsewhere, could take place. SEPA could also have the right to refer any “dubious” proposal to the Scottish Government for a decision on whether it should be an FPS. Many proposals would require planning permission in any case, which gives opportunity for objection.

(b) However if promoting an FPS is not the daunting task it has become at present, Local Authorities will be less reluctant to try to find ways of avoiding one. Therefore the main point of new legislation must be aimed at simplifying the system for Schemes so that a public inquiry can be avoided by adjudication or arbitration where there are few or straightforward objections.

The legislation should be amended so that there is no need to go through the full process for both a FPS and a Planning Application. There must be no question of conjoined inquiries, or of public confusion over whether they can object to a FPS, a Planning Application, or both. The need for two applications with very different details is confusing and time consuming and must be combined into one process. The application must include such details as lines of deviation and land required for access (for the FPS) and construction type, landscaping and environmental impact (for the Planning Application).

The question of whether to use the Planning system, the Flood Prevention Legislation, or another process is one that needs to be addressed. Keeping a “stand alone” Flood Prevention Act (i.e. an amendment to the FPS 1961 Act) would be preferable, but it would also need amendments to Planning legislation.

It is anticipated that the Scottish Government will incorporate a sustainable flood management audit into their process for approval and funding of Schemes. This must be combined with the Environmental Impact Assessment currently required for the Planning Application.

A CAR licence will obviously be required for Schemes. It should be straightforward for SEPA to consider an application concurrent with the Scheme application; indeed this is probably already taking place.

The Flood Prevention (Scotland) Act 1961 has the provision that a Local Authority (LA) has the right, once a Scheme is confirmed, to enter a person’s land and build whatever is in the Scheme. Although there are provisions for compulsory purchase it is not essential for the LA to purchase land on which the works will be built. This is a useful provision, because a landowner is more likely to object to compulsory purchase than to the building of defences.
However it leaves the defences, once constructed, in a rather uncertain status. The LA do not appear to own them, but they have the right to maintain them (indeed they probably have a duty to maintain them). This must be clarified, with the LA having the ownership of the defences but not the land. There should also be penalties for any person who deliberately alters or damages flood defences built under a Scheme.

The present objection period should reduce to 2 months. There should then be a fixed period (2 months) in which hearings are arranged with objectors by the Local Authority and if necessary binding agreements can be reached. Since many objections centre on compensation the opportunity to gain the comfort of an agreement will help remove objections. It should not be seen as a requirement to “buy off” objectors since the need to demonstrate loss should remain.

At present the public inquiry is dominated by the Legal Counsel for the Local Authority and for the principal objectors. The right of Counsel to cross examine witnesses is seen as a serious disadvantage to those objectors who cannot afford such representation (this applies also to Planning Inquiries).

The compulsory period for a legal challenge would seem to be superfluous. It is presumably open to any party to seek an injunction if they consider an action to be illegal, and the present law merely imposes a delay and gives another opportunity for those who can afford the legal costs to pursue their objection.

The question of sustainability (see below) will require careful attention in new legislation to ensure that best practice is not inhibited by restrictions in the activities to be carried out or in the funding process to be used.

The response to the flooding events of early 1990’s was the Flood Prevention and Land Drainage (Scotland) Act 1997. That has had a significant effect in giving LA’s a duty to take repair & maintenance action to prevent flooding. It was a real benefit, its provisions are clear and they should remain.

The European Floods Directive is an opportunity to ensure that those LA’s who have not brought forward proposals for flood prevention schemes (because they have not experienced a flood event) go through the process of carrying out a strategic flood risk assessment and bring forward proposals where the theoretical risk warrants it. It is important that the standards for (1) risk and (2) benefit/cost be clarified to guide LA’s in this process.

The current legislative framework hinders attempts to use non-developed, usually agricultural, land in catchment based flood management. This must be addressed in reform of the flood prevention legislation.

Q3 Who should be responsible for flood management and how should it be funded?

At present flood management is implemented by Local Authorities, with capital works funded approx 80/20% by Scottish Government and LA, and revenue expenditure from LA’s. It is regulated by the Scottish Government and by SEPA.

The present system is basically satisfactory. LA’s are in the best position to decide the priorities for flood management. The provision of grant aid for
capital works is well established and relatively straightforward. SEPA have considerable responsibilities under the Water Framework Directive, but those responsibilities include overseeing catchment management plans which of necessity require co-ordination of a number of bodies. There is no apparent advantage in trying to combine all flood management functions into one body. In England, there is still confusion over roles and arguments over funding.

The main potential problem area would be if Scottish Government funding were to be inadequate to fund all the requests for grant payment, either current or future.

There is also a need to establish a method for funding flood prevention measures which cross established boundaries. In particular, where flooding is caused by surface water, inadequate drainage and culverted watercourses (often a combination of all of these), the solution will involve the Water Authority, the Local Authority (as flood prevention authority and as roads authority), private landowners and developers, and possibly Scottish Government (where agriculture is involved). The current situation makes co-ordination and funding of such projects difficult. The responsibilities do not necessarily require change, but the Scottish Government, as principle funder of Flood Prevention Schemes, should be able to oversee such joint projects and funding methods should be changed to facilitate their operation.

Q4 What role should sustainable flood management play in mitigating the effects of flooding?

Sustainability is basically a requirement which seeks to avoid:

- Consuming more of the world's resources than we can replace
- Consuming more irreplaceable resources than the world can sustain
- Polluting or altering the environment detrimentally for future generations.

The temptation to try to bend the rules to make an activity appear sustainable when it is not, should be avoided. In many cases with flood management that will entail looking at a much broader spectrum of activities than previously. It is essential to avoid putting legislative obstacles in the way of that process. In particular, the requirement for flood prevention scheme to be assessed for sustainability must not be compromised by limits in the activities which can be carried out or the funding process. This is already recognised as a problem, for instance where the best practice of flood management involves alterations to agricultural land.

Flood management is no different from any other human activity and should not take place if it is not sustainable. It is therefore important that genuine sustainability indicators are drawn up.

Building in a flood risk area is unlikely to be sustainable, since it may involve frequent replacement of resources. However building a flood proof building on poor quality flood plain may be more sustainable than building it on good quality farmland or wild habitat higher up.

Building a flood defence may consume less resources than repairing flood damage or demolishing buildings and rebuilding elsewhere. A river restoration which enables the development of brownfield land previously at high risk of
flooding is likely to be more sustainable than greenfield development; but it may not, and every situation must be properly assessed.

Q5  What role can land-use management, the planning system and building regulations play in mitigating the effects of flooding?

It is important to start with the presumption that flooding is a problem because land has not been properly managed in the past. Property has been built in places that are vulnerable to flooding. Management therefore now consists of:

(a) Protecting the areas which can be protected sustainably
(b) Avoiding further development which makes the situation worse
(c) Managing non developed land to improve the situation

The planning system is vital in giving LA’s the power to enforce b, but not much help in a & c. Legislative change is required to help co-ordinate a) and c) (see above).

Building regulations have an important function in settings standards for flood resistant buildings where the planning function decides that they are appropriate. This is a field which is still being developed – it widens the possibilities for sustainable development and therefore the planning and building regulations must be kept up to date with developments. Important decisions on this principle must be made soon to improve the guidance of SPP7.

It is necessary for all 3 disciplines, combined with flood prevention expertise, to work together to provide the most sustainable development solutions. For instance, where piecemeal redevelopment is taking place in a flood risk area there may be an alternative to building flood defences.

In a situation where there is the possibility of comprehensive brownfield development in an area of functional floodplain, all of the above can work together to enable development to take place without raising land, thereby increasing the sustainability of the development. There may not be many examples of this in Scotland.

The question of Sustainable Urban Drainage Systems (SUDS) of course incorporates all these functions and is still suffering from lack of clarity over the responsibilities of agencies particularly Scottish Water. Here the main issues to be resolved are:

- Local authorities are responsible for road drainage which often drains to Scottish Water sewers
- Scottish Water adoption of Surface water sewerage from new developments is unclear
- Many SUDS are left in the hands of private owners with no clear maintenance regime
- Source control of surface water is a building regulation function.

6  Are there any improvements needed to existing flood warning systems?

Despite the extensive improvements made by SEPA in recent years, there is still room for improvement on flood warning systems. The Floodline system, on phone and internet, gives good and generally accurate information. There
does not appear to be any indication that the system may be overwhelmed by numbers, so Floodline as it stands appears to be a good system.

However it depends on the public taking the initiative and making contact.

There is need for a better way of alerting people who are not in a position to make the first move.

SEPA are progressing telephone warning systems, in which automated warnings are made by telephone. This will involve building up a database of phone numbers, and will have to rely on people asking to be on the list. Once established it will fill a gap. It is not clear, however, how flexible this system will be. Ideally it should enable different calls to be made to different areas, preferably small areas. It is likely that warnings to evacuate, for instance will be very specific in area. It would therefore be useful if telephone warning systems can be targeted in this way.

Not many people are without telephones, so the only gap left will be to ascertain who does not have a telephone and make arrangements for either the Local Authority or a community volunteer to warn them. One option would be for the Local Authority to have a network of community volunteers similar to neighbourhood watch.

Until these last 2 systems are in place, the local severe flood warning (i.e. when severe flooding is imminent in a particular area) and evacuation becomes necessary will rest with the local authority or the Police. Resources, in this respect can be an issue. More rural areas are likely to be in a worse situation.

7 How effective are the responses to flood events?

This question can only be answered along with “how effective a response do we want?”

The only fully effective (up to a point) way of protecting property against flooding is by building or improving permanent flood defences. There are very few situations where effective protection can be provided in an widespread emergency. Most LA’s recognise this, and those who have suffered flooding in recent years have responded by bringing forward proposals for flood prevention schemes based on a design flood which exceeds any historical events.

The public should not be led to believe that emergency measures can be effective in the sense of preventing damage. The emergency response must concentrate on:

- Protecting life by identifying dangerous areas and keeping people out of them
- Evacuating flooded areas and providing emergency accommodation.
- Building emergency defences only where feasible and within the limits imposed by available resources.

Emergency plans generally recognise that emergency defences require longer to put in place, therefore will normally include early mobilisation of staff for sandbagging etc.
The most effective emergency response, to prevent damage, is to identify those areas where emergency defences can be erected quickly in a way which will keep the water out i.e. to do what is possible. In the areas where flooding occurs over a long section of riverbank it is rarely achievable, hence the need for change to make it easier and quicker to build permanent defences.

Andrew M Holmes
Director of City Development
City of Edinburgh Council
December 2007
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

FLOODING AND FLOOD MANAGEMENT INQUIRY

SUBMISSION FROM JENNIFER MAIN

1. Floods in 1997 did encroach upon my property and, while water covered the garden and bubbled up under my floorboards it did no real damage. This was due to the fact that, just before reaching what would have been danger levels for me, the River Lossie burst its banks and the water subsided.

2. However, I was a flood victim in November 2002 when the Moray floods caused a lot of havoc. I hope that this account may be of some use to the Inquiry.

3. On both these occasions, before water began to pour out of drains or to overflow from the nearby Tyock burn, (which drains into the river Lossie) water was seen bubbling up out of the ground at various points in my garden in areas where there was no drainage system.

Outline of local history and events

4. People who have lived in this area all their lives can testify that the water table is very near the surface. One neighbour recalls her father attempting to dig an air-raid shelter during WWII but being thwarted when the hole began to fill with water. Another aged local who, as small boy, lived within a few yards of my property, remembers the fun he and his friends would have when they dug holes in his garden and watched them speedily fill up with water.

5. After 1997 I witnessed a survey team engaged in test drilling in the Mart car park, adjacent to my property, and was told by the person in charge that the water table in this area was less than 2 metres below the surface. This is because many hundreds of years ago the whole area was once a loch. The survey team told me they had found evidence of the old loch bed. The loch eventually dried out leaving just the Tyock burn draining into the river Lossie, and left the area a wetland. The name of the main street leading from the town of Elgin to New Elgin is Moss Street, and on old maps it leads to the Moss of Strathcant. Old names such as Pond Park, and Springfield indicate the nature of the land.

6. Over the years there have been several floods in Elgin. Old photographs show the New Elgin road under a few inches of water – although the houses were not then flooded out. At the same time the nearby railway line was badly flooded and there are photographs of a troop train ploughing through several feet of water during the First World War.
7. I have lived in Market Drive since the houses were first built nearly thirty years ago and have never before seen any threat of flooding here – although the adjacent Mart Paddock has at times been ankle deep in water. I often noted that fields along nearby Edgar Road could be very sodden at times when the Tyock Burn was very full, but not overflowing. It would seem that water would be backing up into the fields until it could drain through underground channels into the Tyock Burn.

8. A few years ago retail developments were undertaken in the fields along Edgar road. It is only since these developments that the houses on the New Elgin Road and in Market Drive have been subjected to serious flooding.

9. At the time when my home was being stripped and dried out, developers were planning to start work in the Mart and the Mart Paddock next to my property. Despite my letter-box being taped shut (with a notice attached redirecting mail) my letterbox was opened and notification of development was served. It was only thanks to an observant workman that this notification for building a retail development next door to my property was discovered amongst the debris in the solum. I was then able to effectively question development on the grounds of increased flood risk.

10. At the time of writing, the Moray Development Plan is in the process of preparation and large-scale development is once again proposed for the Mart Paddock. This is the last remaining field which has acted as a sponge in times of heavy rain. On June 1st this year a torrential deluge resulted in drains in Market Drive back-flowing – the one at the bottom of my drive spouted water up to a height of three feet. However, the nearby paddock was waterlogged, but did not over flow into adjoining properties. Had the Paddock been developed, the drainage system would have been even more overloaded and surface water drainage would also have contributed to the problem. Adjoining properties would have undoubtedly been flooded. As it was, the Paddock acted as a sponge absorbing and holding much of the deluge.

Response to questions from the Committee

11. Not being qualified in any form of environmental planning or management I am not able to give anything other than my personal opinions.

What is the potential impact of climate change on the frequency and severity of all types of flooding in Scotland?

12. I have read many serious and compelling articles about climate change (e.g. in The Scotsman, National Geographic etc.) and believe that it will eventually result in increased and more severe flooding episodes in Scotland, including in my local area.
13. During recent years I have been aware of changes – there have been many more sudden torrential downpours here, with unprecedented amounts of water falling in a very short time – rain ‘stotting’ off the pavements with amazing ferocity, and episodes which can only be described as cloudbursts. Whilst short in duration, these episodes can be very severe.

**What changes are needed to the existing legislation?**

14. I feel very strongly that legislation should be changed in order to safeguard existing properties from being endangered by new developments which might possibly exacerbate flood risk. If there is any doubt about potential risk, such as on existing flood plains, then there should be a presumption against building.

15. Legislation could also be considered in order to enable emergency action to breach river banks where appropriate and allow flood water to spread over farmland instead of into areas of housing – obviously landowners should be properly compensated for this.

**Who should be responsible for flood management and how should it be funded?**

16. Flood management should be the responsibility of an impartial department that is not subject to pressure from councils or developers. Despite the automatic claim of there never being enough funding for everything, flooding is an increasing drain on the public and government purse. Good government housekeepers should be able to divert funds from less essential areas in order to deal with a problem which will, if not quickly confronted, result in rapidly escalating costs. The costs will be not just financial, but will impact on business, health and welfare and upon the reputation of the management of this country.

**What role should sustainable flood management play in mitigating the effects of flooding?**

17. Sustainable flood management could oversee proposals for developments on areas of flood risk. They should co-ordinate and advise on local flood alleviation schemes as well as local emergency action plans.

**What role can land-use management, the planning system and building regulations play in mitigating the effects of flooding?**

18. Land-use management, the planning system and building regulations must be co-ordinated and free from any commercial pressures when assessing flood risks.

19. Prevention is always better than cure and a combination of thorough research and common sense must dictate actions in mitigating the effects
of flooding. In severely affected areas it would conceivably be both practical and eventually economical to purchase badly damaged properties, allowing residents to move elsewhere, and thereby creating safe holding areas for water in a flood event.

**Are there any improvements needed to existing flood warning systems?**

20. The present flood warning systems in this area seems dependent upon residents being either near a phone or a computer. While local radio can play an important part in alerting people, not everyone is tuned in. In this area in 2002, while water could be seen encroaching nearby, it was not apparent until the last moment that residents in Market Drive would be flooded. Perhaps someone with an overview of the developing situation could have given us, or a nominated representative, a clearer warning.

**How effective are the responses to flooding events?**

21. The response to the most recent severe flood of 2002 in this area was uneven. The emergency services and council workers worked hard to assist the flood victims in council-owned property and in more severely affected areas near the river Lossie.

22. However, there was no one to help in this area, despite helicopters flying overhead and obviously being aware of the situation. Everyone in this street had to fend for themselves as the water rose. I live in a semi-detached bungalow which is the lowest lying property in the street. Other neighbours in flats and maisonettes were not so deeply flooded and were able to retreat upstairs. I have mobility problems and am widowed, but luckily had a friend with me at the time. Without the assistance of friends and a strong neighbour, I would have suffered a much greater loss. I was fortunate in having my mother living in an upstairs flat just a few doors away, which meant I had an immediate refuge during the night when flood water lay within my home and covered the road to a depth of almost three feet.

23. My octogenarian neighbours were also fortunate in having friends visiting at the time of the flood who were able to give them help. They needed assistance when they were eventually persuaded to leave their home and struggled in the dark through the flood water to higher ground and to sanctuary with a friend. Another octogenarian neighbour managed to flee her property and went to stay temporarily with relatives. Neither at the time of the flood nor during the following days were we visited by any council officials or social workers to check on our welfare or offer impartial advice.

24. Using their initiative and lacking any experience in this situation, my neighbours hired a caravan as temporary accommodation, believing this would be for a short time only. They were unable to operate and empty the chemical toilet. Family members came up from distant homes as soon
as they could and eventually managed to demand help from the council. My neighbours were then given temporary housing in Forres, 12 miles away, and for the next seven months, mostly in winter, travelled back daily to supervise the reconstruction of their home. It was interesting that no-one informed us about the possibility of our homes being contaminated until weeks later when my neighbours were told that anyone entering the house should be wearing protective suits. They had, until their move, been using facilities in their damaged home and had no idea about the possible danger of contamination.

25. After a few weeks sleeping on the floor in my mother’s small flat, I was lucky to eventually find temporary accommodation with a friend, but there seemed no system in place to offer advice or to check on our welfare. (This in spite of the fact that following the previous flood event of 1997, in recognition of the stress endured, local Council employees were given counselling to help them recover from the trauma they had suffered when dealing with the initial phone calls from distraught victims. The flood victims were not offered this counselling.)

26. The effect on the flood victims has been profound. The stress has exacerbated medical problems and this will have certainly resulted in an unquantifiable drain on the National Health Service. Although it can never be proven conclusively, I am sure that the death of at least one near neighbour was a direct result of the trauma of being flooded out twice within five years and the health of his widow has deteriorated steadily.

27. It was not possible to return to normal immediately on return to our reconstructed homes. The loss of personal possessions and the changes within the houses – different furnishings, different creaks and draughts etc., left us all unsettled and disoriented for a long time. Following the flood event of a few hours our lives have been disrupted for several years. Only other flood victims appreciate the deep concern we now feel when there is any heavy rainfall.

28. Apart from obvious financial losses, the mental and physical damage inflicted by this incident has had a profound effect on all those directly involved and caused great disruption to lives and to normal community activities. The real costs are incalculable.

Jenny Main
16 October 2007
Note by the clerks: The Scottish Council for Development and Industry coordinated the third panel of witnesses.

1. The Scottish Council for Development and Industry (SCDI) is an independent membership network that strengthens Scotland’s competitiveness by formulating policies to encourage sustainable economic prosperity. Its members are drawn from businesses, local authorities, trades unions, educational institutions and the voluntary sector from across Scotland.

2. Many SCDI members in the business community have been directly affected by flooding. In particular, the serious floods in Elgin in 1997 and 2002 damaged a number of member companies. In the aftermath of these events, SCDI met and corresponded with the then Deputy Environment Minister Allan Wilson on the insurance problems facing these businesses. SCDI has spoken with these companies in preparing its response to this inquiry and its evidence is substantially based on their experience of the effectiveness of flooding management and the response to flooding events. SCDI believes that economic impact must have a higher priority in the inquiry.

3. The impact of flooding on the tourism industry also needs to be more widely appreciated. While flooding often occurs outside the peak tourism season, repairs and refurbishments to hotel accommodation and tourist attractions – often located in areas at most risk of flooding – can take months during which time these businesses are closed and the local economy seriously suffers.

Question 1: What is the potential impact of climate change on the frequency and severity of all types of flooding in Scotland?

4. Scientists overwhelmingly agree that there will be more frequent and severe flooding.

5. In Scotland, an increase in the maximum flow rates in rivers since the 1960s and an increase in the intensity of severe wet weather incidents in recent years have been reported. Whether or not this can be attributed to climate change, if these trends continue, flooding will be exacerbated as the sewerage system will be unable to cope simultaneously with both higher river water volumes and heavier rainfall downstream.

6. The costs of extreme weather around the world have doubled each decade since the 1970s. Climate change leading to more frequent and severe rainfall in Scotland would undoubtedly have a negative economic
impact, particularly given the historic and ongoing development in floodplains. In addition to the threat to people and properties in the floodplain, the costs will include transport disruption, landslides, damage to other infrastructure or loss of services, and the deterioration of existing flood defences.

**Question 2: What changes are needed to the existing legislation?**

7. The range of relevant legislation needs to be streamlined to clarify responsibilities for flood risk management and the delivery of flood management capital projects. The current process – application by individual local authority, assessment by the Scottish Environment Protection Agency (SEPA), approval in principle by the Scottish Government and eventual funding commitment – is piecemeal and torturously slow.

8. There is a need to create a clear framework which leads to a strategic programme of risk assessment and construction of flood defences. This should be backed by a duty for all responsible authorities to collaborate. It must also be made easier to co-ordinate spending between local authority and Scottish Water budgetary cycles to enable the simultaneous construction of flood management schemes and drainage infrastructure. The Metropolitan Glasgow Strategic Drainage Plan is highlighted as an exemplar.

9. Based on the Moray experience, other issues that the Committee should consider are:

7. The burden to businesses of complying with health and safety legislation to allow work on flood management schemes to go ahead on their land, and concerns about who carries the health and safety risks when it is underway

8. Compensation issues for loss of property and infrastructure, including the lack of clarity around the timescale for making a claim and payment after a Flood Prevention Order is granted. SCDI understands that local authorities could delay this payment for up to 10 years. Businesses also report problems in getting any information from the district valuer and concerns about whether the district valuer can be seen as genuinely independent from the council

**Question 3: Who should be responsible for flood management and how should it be funded?**

10. Problems with the current arrangements which have been highlighted to SCDI include the multiplicity of responsible authorities; the lack of a strategic overview, the absence of which leads to local authorities viewing their own projects in isolation; the system of upfront, match-funding between central and local government, which seems to foster a reluctance on either side to make the initial commitment; and a shortage of specialist skills. All point to the need for a more strategic approach.
11. One of the principal problems faced in Moray is that a small local authority has had to work through a series of flood alleviation schemes, without the range of detailed skills to plan, manage and monitor what is collectively its biggest single civil engineering project. While it is very welcome that the Scottish Government has funded, and there is a commitment to start, the Forres scheme, it must be noted that all the schemes in Moray are years behind schedule and that the Elgin scheme has not yet started.

12. A consistent complaint is the lack of information. Early contractor involvement and upfront consultation with businesses would seem to be the best way to design a deliverable scheme with wide support. However, current procurement processes and culture can be a barrier to this approach. The quality of the designs and specifications presented to contractors may vary widely. Contracts are thus seen as comparatively unattractive at a time when there is no shortage of work for the construction industry.

13. There is a pressing need for a body to take a strategic overview and have overall responsibility for coordinating and developing flood plans, looking well beyond three-year spending cycles, promoting the skills to apply design and specification consistently, and exploring innovative methods of procurement. SCDI supports the proposal that SEPA should become this competent authority, with the local authorities and water authorities acting as responsible authorities. However, SEPA and the Scottish Government must ensure that it does not become another bureaucratic layer. Improving the information flow to businesses must be a key priority.

14. While SEPA may have an enhanced role, it would seem unlikely in the current political climate that it would be given the same responsibility for planning and managing flood management schemes as the Environment Agency in England. This means that the lack of certain skills within local authorities, such as specialist planners, must also be addressed urgently. It has been mentioned to SCDI that Moray Council appeared to make little attempt to import the skills from other councils which have put in place flood prevention schemes in the last decade or so. In view of the planned level of construction activity around Scotland, this approach cannot be adopted in the future, and SEPA and the local authorities must carefully consider the options as part of the shared services/resources agenda. One idea which has been suggested to SCDI is that a virtual delivery company could be created by local authorities with people seconded in from them to do all the work on flood management schemes around Scotland.

15. SCDI has some concerns that the recent announcement in the Scottish Budget may make it more difficult to make progress with strategic flood management schemes. If local authorities become fully responsible for funding flood alleviation schemes within a wider budget - without the need for match-funding from the Scottish Government - this may streamline the process and allow for schemes to be built within a shorter timescale. However, devolving this funding without ring-fencing may make it more challenging to achieve an integrated approach between local authorities,
especially as the priority attached to a scheme may differ upstream and downstream, or mean that funding may be diverted to areas with greater short-term popular appeal.

16. There is a need for national and local prioritisation for those areas at greatest risk. Flood management schemes need not always be based on once-in-a-century events, but should be capable of extension at a later date, perhaps as the impact of climate change becomes clearer. Priority should also be given to both those areas with the highest number of people and businesses at risk and also better protection of important strategic infrastructure such as energy and water facilities, but support should also be offered to schemes important to rural towns and economies, where the recovery period, for example in the tourism industry, may be longer.

17. Appropriate financial incentives and compensation should be available to rural land owners and managers to encourage flood management in the catchment areas for rivers. These should be combined with improvements to downstream defences.

**Question 4: What role should sustainable flood management play in mitigating the effects of flooding?**

18. SCDI agrees that sustainable flood management should be used wherever practical and appropriate, particularly given that the uncertainties around the impact of climate change suggest the need to create a flexible and responsive system of management. Rural land management and smaller scale solutions should be promoted as well as larger flood management schemes.

**Question 5: What role can land-use management, the planning system and building regulations play in mitigating the effects of flooding?**

19. The planning system has a fundamental role to play. It is clear that development in built-up areas on floodplains will continue. But, building on the introduction of the river basin planning system, development plans should be more closely linked to flood management plans in areas of risk. It should be possible for development plans to require higher flood resilience for new buildings on floodplains.

20. While Scottish Planning Policy 7 (SPP7) has specific requirements for undertaking all flood risk assessments, there is little advice on what constitutes an allowance for climate change. This is largely left to the discretion of those undertaking the flood risk assessment. As climate change is considered to be an important aspect of future flood risk, it is recommended that future planning policy should provide more specific guidance on climate change.

21. Greater efficiency, a key aim of the new Planning Act, must be applied to flood management schemes in order to speed up their construction. But, it is important that government at all levels, including its agencies, does not
simply concern itself with the broader environmental issues or their own statutory responsibilities, but considers in a much more joined-up way the impact on individual communities and businesses.

22. During the planning process for the Moray schemes, SCDI members have felt that their comments have been consistently ignored and that their ability to comment has been constrained by a lack of information from the Council. It must be remembered that the costs to businesses of professional help to advise on a scheme or appear at a Public Local Inquiry can be prohibitively high. Given that local authorities are in effect applying to themselves for planning permissions, the onus must be on them to ensure that the views of businesses are heard and taken account of at an early stage.

Question 6: Are there any improvements needed to existing flood warning systems?

23. Yes. Businesses should be contacted through text messages, emails and websites. SCDI is aware that improved systems have been implemented in some areas such as Perth, but other areas have lagged behind. The flooding in North East Scotland on 22 November 2007 illustrated that more needs to be done. Companies liable to be affected by flooding were not contacted by Moray Council and no warning was posted on its website. Many undertake their own monitoring because they know that they will not be alerted by the Council and nearby residents tend to pick up any flood risk when the companies begin putting up their defences rather than from the Council.

24. SCDI welcomes the funding provided to SEPA to establish a flood information dissemination scheme similar to the one operated by the Environment Agency in which individuals and businesses sign-up for warnings. In creating this system, it will be important to clarify who has responsibility for disseminating information. SCDI recommends that SEPA has national responsibility and works with local authorities. However, it may be necessary to extend this further by introducing an “opt-out” service rather than “opt-in”. This would require providing SEPA with access to sensitive personal address and other contact details and this would need to be handled extremely carefully.

Question 7: How effective are the responses to flooding events?

25. The UK is one of the few countries in the world to rely on private insurance companies to provide flood cover. The USA, Canada and most of Europe consider it a catastrophic risk and government financed compensation or insurance is provided. This system has relied on the understanding that government would provide effective flood defences. However, the Association of British Insurers (ABI) has warned recently that increasing cost of flooding events and inadequate management of flood risk by government is putting the system under severe strain. This may make flood insurance prohibitively expensive or even unavailable for more businesses.
26. The immediate cost of the three floods in Elgin in 1997, 2000 and 2002 has been estimated at over £100m. In 1997 and 2002, more than 150 commercial properties were affected. Insurance claims running into millions of pounds were made and significant flood defences were installed by businesses to protect their properties.

27. After the serious flooding event in England in 2000, ABI member companies introduced changes to insurance terms. They made a commitment to continue to insure their existing domestic and small business policyholders, where flood protection schemes were scheduled for completion within a defined period which would reduce the level of risk to an acceptable level. Where a small business is sold the current insurer will consider whether to continue to provide cover. The agreement did not cover issues such as the level of premium or excess of policy, which were left to insurers to price based on their assessment of the risk level.

28. While this commitment protected some, it also had the following consequences:

- Larger businesses, often employing people around Scotland, were not covered.
- Insurance could be priced at a level that put it beyond many policyholders.
- Businesses rely on government putting in place flood protection schemes within an expected time and their policies may be affected when they are not.
- Land value is reduced as it is unclear whether a new owner will get insurance.

29. The following examples illustrate the long-term impact on Moray’s economy:

- SCDI understands that at least one business was forced to leave Elgin.

- One SCDI member based in the Highlands & Islands had tendered for a new car showroom in Elgin and submitted a planning application for a second. The total investment would have been in excess of £800,000 and 20 jobs would have been created in the higher earning and skilled categories. However, it proved impossible to obtain full insurance cover for the development. The company also operates other franchises and as a result of the publicity surrounding the issue and the refusal of the insurance company to provide cover, it put in jeopardy their business relationship with the car manufacturer. A decision was taken not to proceed with these plans until assurances were provided that the flood alleviation scheme had been completed.

- Another SCDI member in Elgin was refused a renewal of cover for damage. Without damage cover it is impossible to get cover for interruption to business. It has since been offered limited cover,
amounting to 5 to 10 per cent of its total requirement, with expensive premiums. It has been told that once a flood scheme is operational and “tested” it will be offered improved terms, but it is unsure what “tested” means in practice. It seems to imply that the company will have to wait for improved terms until the scheme has survived another big (and, therefore, rare) flood.

30. After the 2002 flooding, SCDI wrote to the then Scottish Executive highlighting that some of the larger employers in Elgin were being forced to operate without insurance through no fault of their own. It pointed out the potential repercussions for their operations there and in other parts of Scotland, for the wider Scottish economy and, through business rates, for public finances. SCDI suggested that an Executive backed interim flood disaster insurance scheme for larger businesses in Scotland should be introduced for such cases. The Executive, which appeared unaware that there were companies which had flood cover excluded from their insurance policies, claimed that this would infringe state aid regulations and place “an unquantifiable burden on Executive resources”. However, in the USA some state organisations provide cover in relation to hurricane damage. SCDI would urge the Committee to investigate a similar scheme for flooding damage in Scotland. In the light of the long delay in the government sponsored flood prevention schemes in Moray and elsewhere, it can be argued that it has an obligation to support affected companies.

31. It has also been highlighted to SCDI that the Assessors for business rates are offering minimal relief to businesses with property which is at risk from flooding, even though their valuation on the property market is seriously affected. There is a strong argument that one way the Scottish Government could support these larger businesses would be to offset their higher insurance costs through equivalent reductions in business rates to more accurately reflect the effect of flooding on property value. This would place limits on the burden on the public purse. The Committee should also consider the short-term relief which can be offered to businesses after flooding through councils’ powers to suspend or reduce business rates due to ‘hardship’. There may be a case for suspension of water charges, at least for the period of the clean-up when extra water has to be used for the purpose of clearing pollution.

32. The Committee may also want to consider whether the insurance industry is doing enough to respond to flooding events. SCDI is aware that recent Dundee University research found that some insurers have undertaken sub-standard clear-up operations.

Gareth Williams
Policy Manager – North
Scottish Council for Development and Industry
11 December 2007
## Agenda Item 2

### SSI DESIGNATION FORM

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<th>The Bluetongue (Scotland) Order 2008, (SSI 2008/11)</th>
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### Purpose of Instrument


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<td>Andrew Mylne, 85240</td>
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In view of a number of recent developments, I thought it might be helpful to give you an update on the Bluetongue situation in Scotland and the Scottish Government's work to support the Scottish livestock sector.

Scotland remains bluetongue free; however, the virus is present in England and the related Restricted Zone currently extends as far northwards as Yorkshire. As expected, the arrival of cold weather has inactivated the midge vector, and Defra was able to declare a vector free period on 20 December 2007. The vector free period gives a limited window of opportunity for the movement of animals from a Restricted Zone to holdings in areas free of the disease, including Scotland. Such movements are subject to conditions, which include the requirement for satisfactory pre-movement test results. The conditions set are those required by the European Commission Regulation on bluetongue, and I am legally required to allow any movements that comply with the Regulation.

However, I am aware of the concerns felt by many over the efficacy of the movement conditions and testing regime, particularly in the light of a number of animals from Germany showing positive results following post import testing. I have been pressing the European Commission to tighten the regime of movement controls. Indications are that Brussels are taking this problem seriously and export certification requirements have been tightened.

I take the import of infected animals very seriously. Any such animals will be slaughtered with no compensation. In addition, I will also require two sets of blood tests to be carried out on all other susceptible livestock on the receiving farm, and movement restrictions will be placed on the farm until we are certain that it is clear of infection. Costs associated with these procedures will be charged to the farmer concerned. The costs to the Scottish livestock industry would of course be much greater if Bluetongue was introduced via an unwise import.

I fully support Stakeholder organisations, who have taken the lead in urging their membership to think twice before sourcing livestock from high risk areas. This is consistent with the advice of the Chief Veterinary Officer for Scotland. I am also encouraging producers to check the origin of animals sourced from free areas of affected countries, since they may previously have been within a Restricted Zone. As always, the contribution of individual owners and keepers is vital in terms of being aware of the risks and the signs of disease and reporting any suspicions immediately to the local Divisional Veterinary Manager.

As additional protection for Scotland I have taken powers in the Bluetongue (Scotland) Order 2008 to require that all farmers in Scotland who receive animals from any Bluetongue Restricted Zone must notify the Scottish Government within three days of their arrival in order that post movement checks can be carried out promptly. This has the added benefit of closing the potential loophole on post-movement checks for animals coming from a UK restricted zone, over which I am
aware that there has been some disquiet, and bringing the process more in line with movements from the EU continent. This notification does not remove the requirement to report animal movements under existing arrangements (BCMS and SAMU). Details of the notification process are on the Scottish Government website at http://www.scotland.gov.uk/bluetongue.

During the development of the post movement checking regime for moves from a UK restricted zone to Scotland we discussed what was required with stakeholders and it was agreed that we should maximise the protection of Scotland against bluetongue. Given that the pre-movement tests required, as conducted in the UK, have a sensitivity of 99.9%, there is no significant benefit in repeating the same test once the animals reach Scotland. The real risk to Scotland is from animals moving without pre-movement tests, and this is what the regime put in place will look for. I will be monitoring industry compliance with movement conditions closely. If compliance is not sufficient, I will seriously consider routine post movement tests, which farmers would be charged for.

In addition to live movements you may be interested to note that in discussion with stakeholders, and on the basis of a veterinary risk assessment, we have also taken the opportunity presented by the lower risk vector free period to allow slaughterhouses in Scotland to process animals from the Surveillance Zone (the outer section of the Restricted Zone) in England. To accept these animals, they must be designated to do so by the Scottish Government and the conditions attached to designation are designed to minimise any risk of disease spread. Slaughterhouses have been informed of the designation process and this information is also available on the Scottish Government website at http://www.scotland.gov.uk/bluetongue.

Depending on weather conditions and the re-appearance of immature midges, we are expecting that March 2008 will see the end of the vector free period. We will give the industry as much notice as possible of this and make clear what changes this means in practice in terms of movements of live animals or movements to slaughter out of the restricted zone.

The bluetongue control strategy in Scotland, including the role of vaccination, is regularly discussed with the Animal Health and Welfare Stakeholder Group and a joint Scottish Government and industry position statement has been agreed. A copy is enclosed for your interest. We believe that the primary aim of a UK control strategy should be to contain and eradicate the disease where it is, in South-Eastern England. In view of this, we do not consider that making the whole of Great Britain a Restricted Zone is appropriate at present, since this would free up animal movements and dramatically increase the risk of bluetongue coming to Scotland.

You may be aware of the ongoing development of a BTV8 vaccine, with delivery of the first batch to the UK expected in summer 2008. The European Commission is determined, at present, not to allow vaccination to be used preventively in areas free of the disease. This means that even when the vaccine becomes available, Scotland cannot vaccinate without being declared as a bluetongue Protection Zone, and without incurring the disease risk and trade issues that accompany this.
Since the vaccine is expected to have only a 12 month shelf life, it is not appropriate at present to order vaccine for use in Scotland. We are, of course, keeping this situation under constant review, as well as continuing to press the Commission to change their stance on vaccination in free areas such as Scotland. Should Scotland require vaccine in the future, a supply will be made available.

The Scottish Government will continue to work tirelessly with industry to protect Scotland’s livestock from bluetongue.

Richard Lochhead MSP
Cabinet Secretary for Rural Affairs and the Environment
11 February 2008
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<tr>
<th>SSI Title &amp; No:</th>
<th>The Conservation (Natural Habitats etc.) Amendment (Scotland) Regulations 2008, (SSI 2008/17)</th>
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<td>Michael Russell, Minister for the Environment</td>
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<td>24 January 2008</td>
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<td>1st SLC Meeting</td>
<td>29 January 2008</td>
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<td>Lead Committee Report Due</td>
<td>10 March 2008</td>
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<tr>
<td>SE Contact</td>
<td>Hugh Dignon, 47575</td>
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<td>Committee Contact</td>
<td>Andrew Mylne, 85240</td>
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I note from your letter of 30 January 2008 that you are leading on the development of the Scottish Government’s flooding legislation. The Rural Affairs and Environment Committee held a roundtable discussion on Wednesday 6 February 2008 as part of its ongoing flooding and flood management inquiry. The focus of the discussion was largely on the role that can be played by land use, the planning system and building standards in flood management.

The Committee discussed the evidence heard and, as before, agreed that I should write to you raising key issues that emerged during the course of the discussion. Some of the issues noted are not framed as questions but reflect areas that the Committee feel should be drawn to your attention as you develop legislation on flooding and flood management.

Firstly, there was consensus among the participants that the catchment was the appropriate unit for flood management. Clearly, this presents challenges for local authorities who may need to spend money to benefit other authorities lower in the catchment. The Committee were given an example (the White Cart Water catchment) where this has worked well on a voluntary basis but the Committee believes that structures and processes may need to be put in place (potentially on a statutory basis) to ensure that local authorities co-operate in the best interests of the whole catchment. I should also note that there was a distinct view among participants that the Scottish Environment Protection Agency should take a lead role in flood management at a catchment level.

Secondly, it is apparent to the Committee that a holistic approach to flood management requires contributions from both the planning system and appropriate land management practices. However, the Committee is not convinced that there is currently a robust connection between them to ensure that planners take into account current and potential land management practices that best enable effective flood management.

On a related issue, there are clearly a variety of “soft solutions” (illustrated by various demonstration sites) available for flood management, some of which will relate to land management practices and these may prove to be an integral part of sustainable flood management. However, it is not obvious to the Committee that there has been any coherent attempt to evaluate the relative effectiveness of different “soft solutions” in different environmental settings. This could be a valuable area where the Scottish Government could commission research.

Thirdly, the Committee has already been struck, in the evidence it has heard to date, by the fact that pluvial flooding will represent a major challenge in the future given likely increases in rainfall volume and intensity. In this context, the Committee was concerned to learn that there was no systematic monitoring of the extension of hard
surfaces (and the associated reduction in overall surface porosity) and the impact of runoff from these surfaces on the drainage system.

The Official Report of the meeting will be available from the Committee’s webpage on 11 February 2008. If you wish to respond to this letter, it would be helpful if your reply could be received by the close of Thursday 29 February 2008.

Roseanna Cunningham MSP
Convener
7 February 2008
Thank you for your letter of 14 January to Richard Lochhead about issues raised during the first evidence session of the Rural Affairs and Environment Committee’s Flooding Inquiry. It is useful to have an early opportunity to comment on the points of concern to the Committee. Since I am leading on the preparation of the Flooding Bill, I am responding.

The first issue you raise is the extent of high resolution rainfall radar coverage in Scotland. Flood warning schemes throughout Scotland are provided by the Scottish Environment Protection Agency (SEPA) which was recently granted an additional £1.04 million for flood warning in the North East. I understand that the Committee recently visited a SEPA flood warning control room and are therefore familiar with the variables and measurements that are considered in the decision that results in a flood warning being issued. Although SEPA does use information purchased directly from the MET office, the flood warning schemes utilise a network of rainfall and river monitors situated at key points along a river, which provides SEPA with detailed information on rivers and early warning of flood risk.

For areas of Scotland not covered by a formal flood warning scheme, SEPA monitors weather conditions around the clock and issues flood watches through Floodline if flooding is likely in a general area.

If the Met Office is concerned about the level of radar cover in Scotland, then this is something it needs to consider as part if its responsibility to provide a public weather service for the whole of the UK. The Met Office is an agency of the Ministry of Defence and although The Scottish Government subscribes to the Met Office to receive weather forecasts and advance notice of adverse weather conditions as part of its approach to civil contingencies, we do not have a direct funding role.

You also mentioned the proposal for a joint SEPA/Met Office forecasting service and the need for a statutory duty on the two organisations to work together to provide a flood forecasting and warning service. The Government recognises that a number of important elements come together to manage risks from flooding, including flood warning, and that there are a number of bodies responsible for these different elements. We are therefore considering how best to ensure effective co-operation between the various bodies responsible for delivering flood risk management as part of the preparation for the Flooding Bill.

With regard to coastal developments requiring to be built above a certain height, it is a well established principle that planning applications are determined on their own merits and, as the law says, in accordance with the development plan unless material considerations indicate otherwise. The kind of blanket ban implied by the Met Office

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1 This letter was circulated as RAE/S3/08/2/11 and is also available at: [http://www.scottish.parliament.uk/s3/committees/rae/FloodingCorrespondence9Jan08.htm](http://www.scottish.parliament.uk/s3/committees/rae/FloodingCorrespondence9Jan08.htm)
would not fit with this, but I think our approach seeks to address the same concern. It is set out in Scottish Planning Policy (SPP) 7 - Planning and Flooding, whose central purpose is to prevent further development which would have a significant probability of being affected by flooding, including on the coast. The approach it takes to development on the coast where sea level rise is an issue is summarised below. I would however stress that the SPP reflects the complexity of coastal flood risk issues and the uncertainties of predicting sea level rise, so this summary necessary simplifies the situation. The full SPP can be seen at http://www.scotland.gov.uk/Publications/2004/02/18880/32952 and I would encourage the Committee to read paragraphs 33 - 37 and the 'Risk Framework' on page 10 referred to below.

Preparation of the SPP drew on the UKCIP 02 predictions, including those for sea level rise. Regarding coastal and watercourse flood risk it says "....for planning purposes, taking into account the life of most development and subsequent redevelopment in the longer term, it is reasonable on present evidence to regard areas with a current annual probability of watercourse or coastal flooding above 0.5% (1:200) to be characterised as having a 'medium to high' risk of flooding". This figure was set to include an allowance for climate change. The Planning Advice Note (PAN 69) which supports the SPP provided background on the UKCIP figures and describes the potential effects of tidal surges, increased storminess and extreme winds on sea levels, which of course vary around the coast. To take account of this the SPP says that planning authorities can add an additional allowance for climate change (i.e. above the 0.5%) if it can be justified and that a freeboard allowance may be required as a response to local circumstances. The PAN can be seen at http://www.scotland.gov.uk/Publications/2004/08/19805/41594

For 'medium to high' risk areas, including those on the coast, the SPP sets out the generally appropriate planning response in a Risk Framework. In summary this says that such areas are not suitable for essential civil infrastructure such as hospitals, fire stations, schools etc. For other development it says that areas which are already built up may be suitable for most development provided that appropriate flood defences are in place or planned. For areas which are undeveloped or sparsely developed it says they are generally not suitable for further development, but identifies some exceptions. For example, buildings for water based recreation. For all areas it recognises that land raising, i.e. permanently raising the level of the land, may be an acceptable response.

The SPP therefore sets a height above sea level, defined by the height of a flood with a probability of 0.5% (1:200), as a benchmark for planning authorities to use in the preparation of their development plans, for the determination of planning applications and for use by developers in considering whether to apply for planning permission. In addition it provides for planning authorities to consider the options for managed realignment of the coast and if appropriate to describe suitable locations through their development plan process. Overall I think the SPP provides a sound basis for planning authorities to manage development which would be at risk from the predicted rise in sea level, but necessarily allows for local circumstances and the type of development to be taken into account.

Nevertheless the situation is kept under review. UKCIP 08 will be published later this year. The expectations are that it will make more information available than with
UKCIP 02 which will support the assessment of risks and adaptation options associated with climate change, particularly those related to and addressing extremes like flooding.

Michael Russell MSP  
Minister for the Environment  
30 January 2008
1. The First Minister announced that the Scottish Government would introduce a flooding bill on 5 September 2007.


3. The consultation is available via the Scottish Government’s website at: http://www.scotland.gov.uk/Publications/2008/02/13095729/1 and runs until 23 April 2008.

4. The consultation document poses 34 questions covering flood management and reservoir safety. It does not, however, cover emergency responses to flooding incidents as these are covered by the Civil Contingencies Act 2004.
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

RECENT DEVELOPMENTS WITHIN THE COMMITTEE’S REMIT

Note by the Clerk: Each time an agenda and papers for a meeting are circulated to members, a short paper like this one will also be included as a means of alerting members to relevant documents of general interest which they can follow up through the links included.

SPICe briefing

An updated briefing on Biofuels has been published providing an introduction to biofuels and describing current EU, UK and Scottish biofuels policy frameworks. It also considers the growing biofuel sector in the UK, and some of the arguments surrounding their use and the development of a global biofuels market. To view the briefing, follow this link: http://www.scottish.parliament.uk/business/research/briefings-08/SB08-07.pdf

Reports

A report on the British Wool Marketing Board Agricultural Marketing Schemes 2006-07 was laid before the Parliament on 1 February 2008.

Correspondence with the Scottish Government

From January 2008, correspondence between the Committee and the Scottish Government is available via the Committee’s correspondence webpage at: http://www.scottish.parliament.uk/s3/committees/rae/Correspondence.htm. Such correspondence will no longer be circulated with agendas as “papers for information”. However, correspondence that relates to agenda items will continue to be provided in the papers for the relevant meeting.

Brussels Bulletin

The fortnightly Brussels Bulletin produced by the Parliament’s European Officer is available online at: http://www.scottish.parliament.uk/s3/committees/europe/BrusselsBulletin.htm
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

MINUTES

3rd Meeting, 2008 (Session 3)

Wednesday 6 February 2008

Present:

Roseanna Cunningham (Convener)  Karen Gillon
Jamie Hepburn                    Des McNulty
Peter Peacock                    Mike Rumbles
John Scott (Deputy Convener)     Bill Wilson

The meeting opened at 10.00 am.

1. Flooding and flood management inquiry: The Committee took evidence, in a round-table discussion, from—

   Veronica Burbridge, Director, Royal Town Planning Institute; Bill Dodds, Assistant Chief Executive, Scottish Building Standards Agency; Mike Donaghy, Freshwater Policy Officer, WWF Scotland; Ronnie Falconer, Past President, Chartered Institution of Water and Environmental Management; Andrea Johnstonova, Freshwater Policy Officer, RSPB Scotland; Wendy Kenyon, Senior Research Fellow, Macaulay Institute; David Martin, Scottish Hydrological Group; Blair Melville, Planning Manager, Homes for Scotland; Tom Nisbet, Head of Water, Soil and Heritage Research Group, Forestry Commission Scotland; Karen Smyth, Rural Development Manager, Scottish Rural Property and Business Association; John Thomson, Director of Strategy and Communications, Scottish Natural Heritage; and Hamish Trench, Head of Natural Heritage and Land Management Group, Cairngorms National Park Authority.

2. Pig industry: The Committee considered briefings from the Scottish Parliament Information Centre and National Farmers Union Scotland and agreed to ask the Scottish Government what action it is taking to support the
pig industry. It also agreed to invite representatives of the pig industry and the Scottish Government to give evidence at its meeting on 16 April 2008.

3. **Flooding and flood management inquiry (in private):** The Committee considered the evidence heard earlier in the meeting, and agreed to write to the Cabinet Secretary for Rural Affairs and the Environment on a number of issues raised by witnesses.

4. **Subordinate legislation (in private):** The Committee considered a draft report on the draft Agriculture and Horticulture Development Board Order 2007, the draft Quality Meat Scotland Order 2008 and the Sheep and Goats (Identification and Traceability) (Scotland) Amendment Regulations 2007 (SSI 2007/559). The report was agreed, subject to minor amendments.

The meeting closed at 12.40 pm.

Andrew Mylne  
Clerk to the Committee