#### PERTH AND KINROSS COUNCIL

#### **Environment Committee**

#### **20 November 2013**

# THE FLOOD RISK MANAGEMENT (SCOTLAND) ACT 2009 – PROGRESS REPORT

# **Report by the Depute Director (Environment)**

The Council's duties with regard to flooding are set out within the Flood Risk Management (Scotland) Act 2009. The Council is no longer required to produce a biennial report but has continued with existing reporting arrangements as an interim measure during the introduction of the new Act. This report therefore provides a scheduled progress update on the implementation of this new legislation towards the publication of the Council's Local Flood Risk Management Plans in 2016.

#### 1. BACKGROUND / MAIN ISSUES

- 1.1 The Flood Risk Management (Scotland) Act 2009 (the 2009 Act) has introduced a more modern, coordinated and sustainable approach to flood risk management at both national and local levels.
- 1.2 The 2009 Act sets out a framework designed to reduce flood risk across Scotland over time. Local authorities, SEPA and Scottish Water have duties to work together to produce a national flood risk assessment, flood risk and hazard maps, Flood Risk Management Strategies and Local Flood Risk Management Plans. This process of risk assessment, mapping and planning is to be repeated every six years.
- 1.3 The primary responsibility for avoiding or managing flood risk still remains with land and property owners. The 2009 Act does not alter this.
- 1.4 The Council's duties and responsibilities under the 2009 Act were reported to the Environment Committee on 27 January 2010 (Report 10/51) and 21 March 2012 (Report 12/135) and a summary can be found in Appendix A. The legislation increased the Council's statutory duties and amended existing recording and reporting requirements.
- 1.5 The consideration of this report during the current introductory period of the 2009 Act keeps elected members informed of any flood events and measures taken to reduce flood risk since the March 2012 Committee report. This report also highlights the on-going work being undertaken to comply with the new duties under the 2009 Act.
- 1.6 It should be noted that it is not possible to carry out all of the identified measures to reduce flood risk within the resources available to the Council at this time. Any measures will be undertaken in order of priority taking into account the likely risk of flooding and probable cost of the works.

# 2. PROPOSALS

# **Progress Report**

- 2.1 The 2009 Act requires that draft Flood Risk Management Strategies and the corresponding supplementary parts of Local Flood Risk Management Plans be put to public consultation by 22 December 2014.
- 2.2 The final Strategies must be published by 22 December 2015 and the Local Flood Risk Management Plans by 22 June 2016.
- 2.3 Appendix B provides a progress report on the work carried out to date to implement the 2009 Act towards meeting these deadlines.
- 2.4 It is proposed that an article will be included in the next edition of Perth and Kinross News summarising the report and the progress made on the implementation of the 2009 Act.

# **Local Plan District Partnerships - Governance**

- 2.5 Under Sections 1 and 39 of the 2009 Act, SEPA and responsible authorities have a duty to adopt an integrated approach by co-operating with each other so as to co-ordinate the exercise of their respective functions. It is therefore essential that all parties adopt partnership working to deliver their responsibilities.
- 2.6 For the purposes of managing flood risk, Scotland has been divided up into 14 local plan districts (LPDs). Each LPD has a partnership and a lead local authority. SEPA will produce a Flood Risk Management Plan (commonly referred to as the 'Strategy') for each district and the Lead Local Authority will produce a Local Flood Risk Management Plan.
- 2.7 While formal partnerships are not explicitly required by the 2009 Act, they are considered to be necessary to enable the responsible authorities to comply with their duties.
- 2.8 It is important that partnership working is underpinned by a clear governance and decision making framework. The governance arrangements should promote accountability and co-ownership of the Flood Risk Management Strategies and Plans among all partners.
- 2.9 In order to formalise the working arrangements within the partnerships, governance arrangements have been developed for each LPD, including a structure and terms of reference.
- 2.10 Appendix C includes details of the proposed governance arrangements for LPD Partnerships.
- 2.11 The report seeks the Committee's approval of those governance arrangements.

#### 3. CONCLUSION AND RECOMMENDATIONS

- 3.1 This report provides an update on progress with the implementation of the 2009 Act since the previous Committee report of 21 March 2012.
- 3.2 This report also includes details of any flood events, inspections undertaken, maintenance works, progress on flood protection works and schemes and other measures since the previous Committee report.
- 3.3 Draft governance and terms of reference have been developed for the Tay Local Plan District Partnership. The other lead local authorities for the Forth, Forth Estuary and Tay Estuary Local Plan Districts have also developed similar governance arrangements.

#### 3.4 The Committee is asked to:

- i. Approve the contents of the progress report on the implementation of the Flood Risk Management (Scotland) Act 2009, which is appended to this Committee report (Appendix B).
- ii. Note that an article will be included in the next edition of Perth and Kinross News summarising the progress made on the implementation of the Flood Risk Management (Scotland) Act 2009.
- iii. Approve the proposed governance structure and terms of reference for the Tay Local Plan District Partnership (Appendix C2).
- iv. Approve the appointment of the Head of Environmental and Consumer Services to the Board of all Local Plan District Partnerships that Perth and Kinross Council is a member of.
- v. Note the proposed governance arrangements that have been adopted by the lead local authorities in the Forth, Forth Estuary and Tay Estuary Local Plan Districts (Appendices C3, C4 & C5).
- vi. Note the proposed Member Officer working arrangements for the Tay Local Plan District (Appendix C, paragraphs 3.8-3.13).
- vii. Agree the proposed approval levels against each of the key outputs from the flood risk management planning process (Appendix C, paragraph 5.5).

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**Approved** 

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# 1. IMPLICATIONS, ASSESSMENTS, CONSULTATION AND COMMUNICATION

Strategic Implications	Yes / None
Community Plan / Single Outcome Agreement	Yes
Corporate Plan	Yes
Resource Implications	
Financial	Yes
Workforce	Yes
Asset Management (land, property, IST)	None
Assessments	
Equality Impact Assessment	Yes
Strategic Environmental Assessment	None
Sustainability (community, economic, environmental)	None
Legal and Governance	Yes
Risk	None
Consultation	
Internal	Yes
External	Yes
Communication	
Communications Plan	Yes

# 1. Strategic Implications

# Community Plan / Single Outcome Agreement

1.1 The proposals relate to the delivery of the Perth and Kinross Community Plan/Single Outcome Agreement by reducing flood risk to our residential and business communities in a sustainable manner.

# Corporate Plan

- 1.2 The Council's Corporate Plan 2013 2018 lays out five outcome focussed strategic objectives which provide clear strategic direction, inform decisions at a corporate and service level and shape resources allocation. They are as follows:
  - (i) Giving every child the best start in life;
  - (ii) Developing educated, responsible and informed citizens;
  - (iii) Promoting a prosperous, inclusive and sustainable economy;
  - (iv) Supporting people to lead independent, healthy and active lives; and
  - (v) Creating a safe and sustainable place for future generations.
- 1.3 This report contributes to objectives (ii), (iii), (iv) and (v).

# 2. Resource Implications

#### Financial

- 2.1 There are no resource implications arising directly from the recommendations in this report. However the progress report in Appendix B makes reference to future flood protection schemes. Following implementation of the Concordat between the Scottish Government and Local Authorities, there have been significant changes to funding arrangements for flood schemes.
- 2.2 The most recent changes to this system were introduced as part of the Scottish Government's 2011 Spending Review which covers the period 2012-2015. The distribution of the flooding component of General Capital Grant changed. In the first instance the Scottish Government has allocated funding to support any on-going flood schemes and a small number of outstanding schemes that already have approval under the previous 1961 Act. Perth & Kinross Council had no such schemes.
- 2.3 Any remaining government funding is to be allocated to schemes which have statutory consent under the 2009 Act. Local authorities will be required to make an application to receive a share of the remaining funding. Those schemes that meet the government's criteria will receive grant funding of up to 80% of eligible capital costs. No date has been set for funding applications.
- 2.4 The current arrangements do not apply to flood schemes of less than £2M in value. Local authorities are expected to fund any such schemes themselves.
- 2.5 It is understood that the future capital funding arrangements for flood schemes are currently being discussed by the Scottish Government and COSLA. However no details are available at present.
- 2.6 Clearly the issue of funding support from central government will continue to have a significant bearing on when the Council will be able to deliver such schemes in the future. Although this report highlights the Council's intention to promote flood protection schemes in a number of areas, there continues to be uncertainty over when these schemes might be delivered.

# Workforce

2.7 As noted in the previous report to Committee on 21 March 2012, additional staff have been allocated to the flooding team to address the new duties brought about by the changes to the legislation.

# Asset Management (land, property, IT)

2.8 The proposals in this report have no asset management implications.

#### 3. Assessments

# **Equality Impact Assessment**

- 3.1 Under the Equality Act 2010, the Council is required to eliminate discrimination, advance equality of opportunity, and foster good relations between equality groups. Carrying out Equality Impact Assessments for plans and policies allows the Council to demonstrate that it is meeting these duties.
- 3.2 The function, policy, procedure or strategy presented in this report was considered under the Corporate Equalities Impact Assessment process (EqIA) with the following outcome:
  - i) Assessed as **relevant** and actions taken to reduce or remove the following negative impacts:
    - The effects and aftermath of flooding could have a greater impact on mobility impaired, sight impaired or blind people or learning disabled people, children, the elderly and infirm, pregnant women or nursing mothers in relation to adverse psychological, physical and health impacts. The various measures to reduce flood risk described in the report will reduce or remove these negative impacts.
  - ii) Assessed as **relevant** and the following positive outcomes expected following implementation:
    - The measures will reduce the risk of flooding to residents and businesses in Perth & Kinross (regardless of their equality protected characteristics) with consequent benefits for all (a safer environment, avoidance of economic flood damages, improved health & wellbeing, etc)

# Strategic Environmental Assessment

- 3.3 The Environmental Assessment (Scotland) Act 2005 places a duty on the Council to identify and assess the environmental consequences of its proposals.
- 3.4 The matters presented in this report were considered under the Environmental Assessment (Scotland) Act 2005 and no further action is required as it does not qualify as a PPS as defined by the Act and is therefore exempt.
- 3.5 Note that there are likely to be significant environmental effects associated with the Tay Local Flood Risk Management Plan and the other three Local Flood Risk Management Plans that the Council will contribute to. As a consequence an environmental assessment is necessary. SEPA will be carrying out a similar exercise for their Flood Risk Management Strategies. A scoping report, which will determine the scope of the environmental assessment, is to be prepared in liaison with SEPA for submission to the Consultation Authorities.

# Sustainability

- 3.6 Under the provisions of the Local Government in Scotland Act 2003 the Council has to discharge its duties in a way which contributes to the achievement of sustainable development. In terms of the Climate Change Act, the Council has a general duty to demonstrate its commitment to sustainability and the community, environmental and economic impacts of its actions.
- 3.7 There are no sustainability issues arising out of this report. However under the 2009 Act, the Council has a duty to manage flood risk in a sustainable way and to act in the best way calculated to contribute to the achievement of sustainable development. The measures that will be identified in the Council's future Local Flood Risk Management Plans will comply with these requirements.

### Legal and Governance

- 3.8 The Head of Legal Services and the Head of Democratic Services have been consulted on this report.
- 3.9 The proposed governance arrangements for Local Plan District Partnerships are set out at Section 2 and Appendix C of the Committee report.

#### Risk

3.10 The risks associated with any individual proposals to address flooding are identified and managed through individual projects.

# 4. Consultation

#### <u>Internal</u>

4.1 The Head of Legal Services, the Head of Democratic Services and the Head of Finance have been consulted in the preparation of this report.

# **External**

4.2 Consultation is carried out with relevant external stakeholders on any individual proposals.

The governance proposals set out in this report have been developed and agreed in principle at Local Plan District Partnership meetings with SEPA, Scottish Water, Stirling Council, Angus Council and Fife Council.

#### 5. Communication

5.1 An article will be included in the next edition of Perth and Kinross News summarising the progress made on the implementation of the Flood Risk Management (Scotland) Act 2009.

Communication is carried out with relevant external stakeholders on any individual proposals to reduce flood risk.

# 2. BACKGROUND PAPERS

The following background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (and not containing confidential or exempt information) were relied on to a material extent in preparing the above Report;

PKC - Environment Committee – 4 November 2009, Biennial Report on Flood Prevention Responsibilities 2009 (Report No. 09/504)

PKC - Environment Committee – 27 January 2010, Flood Risk Management (Scotland) Act 2009 (Report No. 10/51)

PKC - Environment Committee – 1 September 2010, Flooding at Bridge over Inchewan Burn, Birnam (Report No. 10/462)

PKC - Environment Committee – 7 September 2011, Almondbank Flood Protection Scheme (Report No. 11/444)

PKC – Environment Committee – 21 March 2012, Biennial Report on Flood Prevention (Report No 12/135)

PKC Environment Committee – 20 March 2013 - Greenloaning Flood Mitigation Scheme (Report No 13/130)

# 3. APPENDICES

- Appendix A Summary of the Council's Duties under the 2009 Act.
- Appendix B Flood Risk Management (Scotland) Act 2009 Progress Report
- Appendix B1 Map of Potentially Vulnerable Areas
- Appendix B2 Map of Local Plan Districts
- Appendix B3 Map of Local Advisory Groups
- Appendix B4 Incidences of Flooding Since November 2011
- Appendix B5 Main Watercourses in Perth & Kinross
- Appendix B6 Assessments and Proposed Maintenance Works
- Appendix B7 Maintenance Works Undertaken
- Appendix C Proposed Local Plan District Governance Arrangements
- Appendix C1 Types of Partnership Arrangements
- Appendix C2 Proposed Governance Structure and Terms of Reference – Tay LPD

- Appendix C3 Proposed Governance Structure and Terms of Reference
   Forth LPD
- Appendix C4 Proposed Governance Structure and Terms of Reference
   Forth Estuary LPD
- Appendix C5 Proposed Governance Structure and Terms of Reference
   Tay Estuary and Montrose Basin LPD
- Appendix C6 Flood Risk Management Planning Key Outputs

# Summary of the Council's Duties under The Flood Risk Management (Scotland) Act 2009

This Act was passed by the Scottish Parliament and received Royal Assent in 2009 and places new responsibilities on the Council to manage flood risk. The 2009 Act completely repeals the Flood Prevention (Scotland) Act 1961 (as amended). All sections of the 2009 Act have now been commenced.

The following summarises the legal duties placed on the Council with regard to flood risk management:-

- Identify and map all bodies of water within their area including surface water and sustainable urban drainage systems (SUDs).
- Assess bodies of water within their area from time to time including surface water and culverted or piped systems
- Carry out clearance and repair work on bodies of water where this will substantially reduce flood risk.
- Prepare a schedule of clearance and repair work and make available for public inspection.
- Assist SEPA in preparing the national flood risk assessment, flood hazard and risk maps and Flood Risk Management Strategies.
- Prepare Local Flood Risk Management Plans for relevant local plan districts by June 2016. These plans are based on catchments and will require cross boundary working between Councils. The plans must be subject to consultation and be published. Perth & Kinross Council will be involved in 4 local plan districts:
  - (i) The Tay (The Council is the Lead Authority within this district)
  - (ii) The Tay Estuary and Montrose Basin
  - (iii) The Forth
  - (iv) The Forth Estuary
- Publish an interim report within 2 -3 years of the publication of the Local Flood Risk Management Plan and a final report 5-6 years after publication.
- Have regard to both the Flood Risk and Local Flood Risk Management Plans.
- Exercise its flood risk related functions with a view to reducing overall flood risk and:

- Act in the best way calculated to manage flood risk in a sustainable way.
- Act with a view to raising public awareness of flood risk.
- Act in the best way calculated to contribute to the achievement of sustainable development.
- So far as practicable, adopt an integrated approach by co-operating with SEPA and other Responsible Authorities.
- Create a register of flood protection schemes since the 1961 Act.
- The Act includes permissive powers to undertake flood protection works.

There are significant changes under the new legislation:

- Flooding from all sources must be considered, i.e. watercourses, coastal waters, surface water and groundwater.
- There is no longer a distinction between the flooding of agricultural and non-agricultural land.
- The Council is responsible for the clearance and repair of relevant bodies of water and no longer just the maintenance of watercourses.
- A relevant body of water refers to a body of surface water other than a stretch of coastal water, or a body of underground water forming part of a watercourse and includes piped and culverted systems and SUDs. It excludes sewers and drains which drain into sewers.
- There is a requirement to work collaboratively with other Local Authorities, SEPA, Scottish Water, Scottish Government and any other relevant stakeholder

Note that the primary responsibility for avoiding or managing flood risk still remains with land and property owners.

# **Perth & Kinross Council Environment Service**

# The Flood Risk Management (Scotland) Act 2009

# **Progress Report**

# **CONTENTS**

- 1 Introduction
- 2 The Flood Risk Management (Scotland) Act 2009
- 3 Flood Events Since November 2011
- 4 Measures Taken and required to Reduce Flood Risk
- 5 Flood Protection Works and Capital Schemes
- 6 Other Activities

# 1. INTRODUCTION

- 1.1 The Flood Risk Management (Scotland) Act 2009 (the 2009 Act) has introduced a more modern, coordinated and sustainable approach to flood risk management at both national and local levels.
- 1.2 The 2009 Act sets out a framework designed to reduce flood risk across Scotland over time. Local authorities, SEPA and Scottish Water have duties to work together to produce a national flood risk assessment, flood risk and hazard maps, Flood Risk Management Strategies and Local Flood Risk Management Plans. This process of risk assessment, mapping and planning is to be repeated every six years.
- 1.3 A summary of the Council's duties under the 2009 Act is contained in Appendix A of the main Committee report.
- 1.4 The consideration of this report during the current introductory period of the 2009 Act therefore keeps elected members informed of the following:-
  - The on-going work being undertaken by the Council to comply with the new duties under the 2009 Act;
  - All occurrences of flooding since the previous report to Committee on 21 March 2012;
  - The measures which the Council has taken since the date of publication of the previous report in March 2012 to reduce the risk of such flooding;
  - The measures which the Council considers are required to be taken to reduce the risk of flooding in Perth and Kinross.

# 2. THE FLOOD RISK MANAGEMENT (SCOTLAND) ACT 2009

# Responsibilities under the 2009 Act

# Responsible Authorities

- 2.1 The Flood Risk Management (Scotland) Act 2009 (the 2009 Act) places duties on SEPA and responsible authorities to manage flooding in a sustainable manner. The responsible authorities are local authorities and Scottish Water and any other public bodies and office holders designated as such by the Scottish Ministers.
- 2.2 The Scottish Government has recently indicated its intention to designate the National Park Authorities and the Forestry Commissioners as new responsible authorities under the 2009 Act.

# Responsibilities within Perth and Kinross Council

2.3 The Council has determined that its functions under the 2009 Act shall be delegated to the Environment Committee and the Executive Director (Environment).

# **The Flood Risk Management Planning Process**

# National Flood Risk Assessment

2.4 SEPA published Scotland's first national flood risk assessment on 22 December 2011. This identified 243 areas across Scotland considered to be at medium to high risk of flooding. These areas are designated as Potentially Vulnerable Areas (PVA's); Perth and Kinross has 19 PVA's, (Refer to Appendix B1) 1 in 22 residential properties and 1 in 13 businesses across Scotland are considered to be at risk of flooding.

# Local Plan Districts

- 2.5 For the purposes of managing flood risk, Scotland has been divided up into 14 local plan districts (LPD's) which take account of hydrological river catchment boundaries, local administrative boundaries and coastal areas (Refer to Appendix B2). Each LPD has a lead local authority. SEPA will produce a Flood Risk Management Plan (commonly referred to as the 'Strategy') for each district and the Lead Local Authority will produce a Local Flood Risk Management Plan.
- 2.6 In July 2011, the Scottish Government nominated Perth & Kinross Council as the lead local authority for the Tay LPD. The Council's area also falls into three other districts as follows:
  - Forth (lead local authority: Stirling Council);
  - Forth Estuary (lead local authority: City of Edinburgh Council);

 Tay Estuary and Montrose Basin (TEAMB) (lead local authority: Angus Council).

# Flood Hazard and Flood Risk Maps

- 2.7 Section 21 of the 2009 Act requires SEPA to produce and publish new flood hazard and flood risk maps for the PVA's by 22 December 2013. These maps will show the predicted extent and depth of various forms of flooding and probability levels and will indicate the potential adverse consequences for each type of flood.
- 2.8 The Council's flooding team has provided SEPA with any existing information to support this process and has attended workshops to comment on draft versions of the maps.

# Section 16 Sewer Assessments and Maps

- 2.9 Section 16 of the 2009 Act requires Scottish water to assess the flood risk from sewerage systems for each PVA.
- 2.10 SEPA consulted with responsible authorities on the form and technical details of this assessment and the areas requiring assessment in April and May 2012.
- 2.11 The form of assessment was finalised in September 2012. 206 sewer catchments across Scotland were identified that currently require an assessment. This work will be carried out over multiple flood risk management planning cycles. Of these, 67 sewer catchments have been identified as having a hydraulic sewer model of suitable quality to allow it to be included in the first cycle. Those sewer catchments without suitable models will be upgraded for use in subsequent cycles.
- 2.12 As a result of this process, the following sewer catchments in Perth & Kinross will be assessed for the first flood risk management plan cycle:-

Name of Sewer Catchment	Local Plan District
Kinross WWTW	Forth Estuary
Levenmouth PFI – Levenmouth WWTW	Forth Estuary
Perth City WWTW	Tay
Tay PFI Hatton PFI	TEAMB

2.13 In addition to the above, five further areas in Scotland have been prioritised by Scottish Water in consultation with the Scottish Government, SEPA and local authorities for detailed modelling of the sewer network. Where it has been identified that there are interactions with the sewer network and other sources of flooding, then integrated hydraulic modelling of all sources is being carried out. The five integrated catchment study (ICS) areas are Edinburgh, Grangemouth, Aberdeen, Irvine to Ayr and Dundee.

2.14 There will be a small benefit to Perth and Kinross as the Dundee ICS will cover the sewer catchment to the west of Dundee, including some of the Invergowrie area.

# Flood Risk Management Strategies

2.15 Section 27 of the 2009 Act places a duty on SEPA to prepare Strategies for the management of flood risk within the PVA's identified in the national flood risk assessment. These Strategies will describe the measures to manage flood risk to be applied at a local level which will be detailed in the Local Flood Risk Management Plans.

# Local Flood Risk Management Plans

- 2.16 Section 34 of the 2009 Act places a duty on lead local authorities to prepare Local Flood Risk Management Plans to describe how the measures described in the Strategy will be implemented.
- 2.17 These Local Plans will be produced in cooperation with the other local authorities in the LPD and will consist of two parts a supplementary part and an implementation part. The supplementary part will include a summary of the objectives and measures included in the relevant SEPA Flood Risk Management Strategy. The implementation part will describe the timescales, responsibilities and funding arrangements for the proposed measures to manage flood risk.
- 2.18 The 2009 Act requires that draft Strategies and the corresponding supplementary parts of Local Flood Risk Management Plans be put to public consultation by 22 December 2014.
- 2.19 The final Strategies must be published by 22 December 2015 and the Local Flood Risk Management Plans must be published by 22 June 2016.

# Surface Water Management Plans

- 2.20 The 2009 Act requires responsible authorities to manage the flood risk from all sources, including surface water flooding. Responsible authorities will therefore produce Surface Water Management Plans (SWMPs) to help with this. The production of SWMPs is considered to represent current best practice to manage the risk of surface water flooding.
- 2.21 Guidance has been issued by the Scottish Government to assist responsible authorities in the preparation of SWMPs to help with the management of surface water flooding as required under the Act.
- 2.22 Local authorities will lead on the preparation of SWMPs which are to be coordinated with the flood risk management process set out in the 2009 Act. SEPA and Scottish Water will also be key participants in this.

2.23 It is anticipated that Partnerships will be set up shortly to develop and implement SWMPs. However, the Council is currently awaiting the identification of priority areas for SWMPs and the flood hazard and risk data that has been developed by SEPA and Scottish Water.

# SEPA Strategic Appraisal Contracts

- 2.24 Following the publication of the national flood risk assessment, SEPA commenced the appraisal work required to support the flood risk management planning process set out by the 2009 Act. The aim of this work is to set objectives and identify measures for the management of significant flood risks within the identified PVAs. The information generated will be used by SEPA in Flood Risk Management Strategies and by lead local authorities in Local Flood Risk Management Plans.
- 2.25 This work will be delivered through three regional appraisal contracts covering the north, south east and south west regions of Scotland through SEPA's Contract Framework Agreement. SEPA have engaged consultants Halcrow to carry out the appraisal work for the south east region. Perth & Kinross is located in this region and the Councils flooding team will therefore be given an opportunity to engage with SEPA's appraisal consultant on the appraisal work. The Council will also have an opportunity to sign-off the deliverables produced by the consultant.
- 2.26 SEPA is keen to ensure that each regional contract is managed in an open and transparent way and has therefore also established three regional steering groups to oversee this work. The steering groups consist of SEPA, the appraisal consultant and lead authorities in the region.
- 2.27 As the lead authority for the Tay LPD, Perth & Kinross Council is represented on the South East Regional Steering Group. To date the steering group has met three times and has discussed progress to date, the management of risks and issues and the likely deliverables from the appraisal work. It should be noted that the local authorities on the steering group do not have any financial or contractual responsibilities but are there to coordinate their LPD activities with the appraisal consultants and to provide general guidance and advice.

#### SEPA Data Requests

- 2.28 The Council has shared a considerable amount of information with SEPA to support this new process, including information on existing flood studies, flood schemes, awareness raising activities, hydraulic models, bridges and culverts in flood risk areas.
- 2.29 The output from the appraisal work is also to be provided to local authorities and Scottish Water by SEPA.
- 2.30 In order to facilitate this process in the future, SEPA has initiated a data sharing platform (known as 'Huddle') which will improve the ease with which large amounts of data can be shared.

# **Partnership Working and Advisory Groups**

- 2.31 A number of local partnerships and advisory groups have been set up to help deliver the Flood Risk Management Strategies and Local Flood Risk Management Plans.
- 2.32 The responsibilities for flood risk management are shared amongst a number of organisations. It is therefore essential that all parties adopt partnership working to deliver their respective responsibilities.

# LPD Partnerships

- 2.33 In order to move the flood risk management process forward, LPD Partnerships were set up in early 2012. To date the partnerships have consisted of representatives from SEPA, Scottish Water, the lead local authority and other local authorities.
- 2.34 The Tay LPD Partnership meets every 8 weeks. Joint meetings are held between the Tay and Forth LPDs in order to reduce the number of meetings and improve efficiency.
- 2.35 Members of the Councils flooding team also attend meetings of the Forth Estuary and Tay Estuary & Montrose Basin LPD Partnerships at similar intervals.
- 2.36 More detail on the structure and governance arrangements for these LPD Partnerships is described in the proposals in Appendix C.

# **Advisory Groups**

- 2.37 It is important that the production of Flood Risk Management Strategies and Local Flood Risk Management Plans benefit from the input of local stakeholders. Sections 49 and 50 of the 2009 Act require district and subdistrict advisory groups to be set up to advise SEPA and lead local authorities on these matters.
- 2.38 A National Flood Management Advisory Group was set up in April 2011 to provide advice and support to SEPA and lead local authorities.
- 2.39 Local Advisory Groups (LAGs) were also set up in November 2012. A map of the local advisory groups across Scotland is shown in Appendix B3. The local advisory groups have a statutory role in providing advice on the coordination and integration of flood risk management planning with other strategic plans and policies, particularly River Basin Management Planning.
- 2.40 Through its role as the lead local authority for the Tay LPD, members of the Council's flooding team have attended the Tay LAG and the Forth LAG. The latter groups is also attended by a representative from the Council's Planning Service. The LAGs meet every six months and have met twice so far to

discuss such topics as the flood risk management planning process and natural flood management.

# Lead Local Authority Forum

2.41 Since March 2012, lead local authorities have met every 3 months to share knowledge, experience and good practice and to address common issues arising through the work of LPD Partnerships under the 2009 Act. This is primarily a non-statutory discussion forum which provides opportunities to identify risks and issues within the current process which may impact on the preparation of Local Flood Risk Management Plans to the statutory deadlines. The forum is supported by SEPA and the Scottish Government and Scottish Water also attend.

# Scottish Advisory and Implementation Forum for Flooding

- 2.42 The Scottish Government set up the Scottish Advisory and Implementation Forum for Flooding (SAIFF) to support the implementation of the 2009 Act by advising the government on the preparation of government policy, subordinate legislation and the preparation of agreed technical guidance and procedures. This is a partnership between the Scottish Government and Scottish public bodies (mainly the responsible authorities under the 2009 Act).
- 2.43 SAIFF comprises a series of working groups (called Task and Finish Groups), each with a specific remit. These groups are convened to help develop specific guidance or undertake further analysis of important technical issues. To date, Task and Finish Groups have been set up to consider a number of issues. The Council's flooding team have been involved in groups that have developed draft guidance on clearance and repair work, draft flood risk management plan templates, considered communications issues surrounding the 2009 Act and the Scottish Digital River Network (refer to Section 4 of this report).

# **SCOTS Flooding Group**

2.44 The SCOTS Flood Group is working with the Scottish Government, SEPA, Scottish Water and SAIFF to help implement the 2009 Act. The group arranges regular meetings with local authorities, SEPA and Scottish Water to offer advice, to engage with and brief members on developments.

# Elected Member Workshop – 29 May 2013

- 2.45 In order to raise awareness of the 2009 Act, Angus Council invited elected members from the Tay, Forth and Tay Estuary local plan districts to a joint workshop in Perth on 29 May 2013.
- 2.46 The event was well attended and allowed the flood risk management process and the implications for elected members to be more widely discussed. Presentations were made by SEPA, lead local authorities and Scottish Water.

2.47	Further events of this nature are being planned to provide elected members with more opportunity to understand the need for quick decision-making, cross-boundary working and to be actively involved in the process.	

# 3 FLOOD EVENTS SINCE NOVEMBER 2011

- 3.1 All incidences of flooding of land are recorded on a central register. This includes information on the extent of flooding, any damage to property incurred and the source of flooding, where known.
- 3.2 It should be noted that it is not always possible to record all flooding incidences or full details of any flooding. Often flooding occurs across a wide area and it is not always possible for Council staff to attend. Some flooding is only reported by those affected after the event. The absence of any area or flood event from this flood register does not therefore imply that it is free from flood risk.
- 3.3 Most incidents of flooding involve the flooding of public roads, parks and gardens. Although these are recorded on the central register, for brevity they have been omitted from the extracted version included in Appendix B4. Road flooding is mainly affected by the capacity of road drainage systems being exceeded, run off from adjacent land, etc and not by blocked or overtopped watercourses.
- 3.4 2012 was a particularly wet year across Scotland and Perth & Kinross was badly affected. Several flood events have occurred since the previous Committee report in March 2012 and these events affected a number of areas within Perth & Kinross including Dalginross, Coupar Angus, Milnathort and Scone. A full list is included in Appendix B4.
- 3.5 As a result, the Council's initial response has included the following:-
  - Emergency response the Council has attended flooding events and worked with the emergency services to assist affected residents and businesses through the provision of sandbags and pumps.
  - The Council has carried out assessment, inspection and maintenance works to watercourses in many areas.
  - Drainage system investigations and improvements have taken place in some areas to alleviate flooding.
  - Providing advice to residents and businesses to raise awareness of how to deal with flooding.
- 3.6 The Council's work to investigate flooding in the above areas is on-going. Part of this work involves engaging consultants to undertake flood studies in the worst affected communities and to advise on the feasibility of implementing flood protection schemes. The Council is actively promoting a number of flood protection schemes in Perth & Kinross in the areas referred to in Section 5 of this report. However as the Council's resources are limited, work on these studies and schemes has been prioritised to concentrate on the areas where flood risk is greatest.
- 3.7 Following the severe flood events in Comrie in 2012, the Council engaged consultants to recommend measures to reduce the likelihood of future flooding from the Water of Ruchill. The identified measures were implemented

- in Dalginross during the latter half of December 2012 and into 2013. Further details are provided in Section 5 of this report.
- 3.8 The Council is also working closely with Scottish Water to try to identify whether any further measures are appropriate in some of the areas noted above.

#### 4. MEASURES TAKEN AND REQUIRED TO REDUCE FLOOD RISK

# Introduction

- 4.1 The first Flood Risk Management Strategies and Local Flood Risk Management Plans will be published in December 2015 and June 2016 respectively and will identify measures to reduce flood risk within PVA's.
- 4.2 Work to develop these Strategies and Plans has commenced but in the meantime, the Council continues with on-going work to reduce flood risk in a number of areas. Any such on-going activity has been reported to SEPA and will be fully considered in the Strategies and Plans.

# Maps of Water Bodies

- 4.3 Section 17 of the 2009 Act requires the Council to prepare a map which shows relevant bodies of water and sustainable urban drainage systems in its area. Section 18 of the Act requires the Council to assess the relevant bodies of water (other than canals) in its area for the purpose of ascertaining whether the condition of any such body of water gives rise to a risk of flooding of land.
- 4.4 In order to comply with the 2009 Act, it was therefore essential to use and develop the existing list of watercourses within Perth & Kinross that could lead to flooding refer to Appendix B5. A list of existing sustainable urban drainage systems is also being prepared.
- 4.5 The Scottish Government, SEPA, Scottish Water and Scottish local authorities have identified a need for detailed river mapping to support the implementation of the 2009 Act. In 2011 the Ordnance Survey began a collaborative project with stakeholders to develop a Scottish detailed river network (SDRN). This will include OS mapping, hydrological information from SEPA and culvert information from Scottish Water. The Council's flooding team is currently in the process of commenting on the SDRN for Perth & Kinross. Once developed to a sufficient standard, it is hoped that the SDRN can be adopted for the Council's map of water bodies.

# Assessment of Water Bodies

- 4.6 Under the 2009 Act, the Council has a duty to assess relevant bodies of water from time to time in order to ascertain whether their condition gives rise to a risk of flooding. The recent assessments use the existing watercourse list as a basis with further bodies of water added where it has been identified that they may give rise to a risk of flooding.
- 4.7 Some bodies of water within the Perth & Kinross area currently require frequent inspections (on a weekly, monthly or annual basis) while those that present less of a risk of flooding being less frequently inspected. The frequency of inspection varies depending on the likelihood and risk of flooding from that source. These assessments are based on findings from previous

assessments as well as information from the public and flooding incidents that have occurred within the Council's area.

4.8 The majority of inspections are usually undertaken between June and November and include many smaller watercourses and ditches as well as culverts and trash screens. The trash screens within the Perth flood scheme are inspected and cleared on a weekly basis. The summary of inspections carried out in 2012 and 2013 is included in Appendix B6.

# Schedule of Clearance and Repair Works

- 4.9 Section 18 of the 2009 Act requires the Council to produce a schedule of clearance and repair works, where a body of water gives rise to a risk of flooding and the Council considers that clearance and repair works would substantially reduce that risk. Section 59 requires the Council to carry out any works described in the schedule.
- 4.10 The Council must make the schedule available for public inspection. The Environment Committee of 21 March 2012 approved the publication of a Schedule of Clearance and Repair on the Council's website. This has been delayed pending the publication of guidance by the Scottish Government. However the schedule will be published on the Council's website shortly.
- 4.11 A list of maintenance work required has been drawn up based on the assessments of water bodies carried out in 2012 and 2013 and the register of flood events. This list is summarised in Appendix B6. This work will be undertaken in order of priority based upon the risk of flooding and likely cost of the work.
- 4.12 From these inspections of water bodies, an assessment of future inspection requirements was made. Proposed inspection frequencies are also shown in Appendix B6.
- 4.13 Work has continued on the development of an inspection system similar to that used for roads inspections. This Flood Management System is now up and running and will assist in recording assessments, works required and completed.
- 4.14 The Council has undertaken a limited amount of maintenance work since March 2012 and a full list of all works undertaken is given in Appendix B7. This has generally consisted of clearance of debris and vegetation, repairs to culverts and pipes, a programme of screen replacement, and camera surveys of recently discovered pipes and culverts.

# Maintenance of Existing Flood Protection Schemes

- 4.15 Perth & Kinross Council operates and maintains formal flood protection schemes in the following areas:
  - Dalginross

- Perth
- Bridge of Earn
- Weem (by Aberfeldy)
- Milnathort
- 4.16 Work is underway to inspect the flood schemes on an annual basis (as a minimum), and more frequently for critical elements of the schemes. Any defects are recorded and this information used to programme maintenance and repair work.

# Promotion of Flood Protection Schemes

4.17 The Council has undertaken flood studies in a number of areas where flooding has occurred. Schemes are being promoted in areas where a benefit/cost ratio of greater than 1.0 can be demonstrated, i.e. where the cost of the flood protection measures is less than the cost of flood damage likely to be avoided over a period of time. Further information is provided in Section 5 of this report.

# 5. FLOOD PROTECTION WORKS AND CAPITAL SCHEMES

# **Completed Works and Schemes**

# Dalginross Flood Protection Works

- 5.1 Dalginross was severely affected by flooding from the Water of Ruchill on 27 August and 19 November 2012. The exact number of properties affected remains unclear although from the Council's post flooding investigations approximately 60 were affected in some way during the August flood and 150 during the November flood.
- 5.2 As a result the Council implemented the following range of measures to reduce the flood risk to Dalginross from the Water of Ruchill:-
  - Works to remove fallen trees from the bed and banks of the Water of Ruchill.
  - Works to remove a build up of gravel in the Water of Ruchill near Ruchilside, in order to reduce the pressure on an eroded section of river bank where flood water had previously spilled out.
  - Erosion protection measures were implemented at the eroded section of river bank. A rock armour revetment was constructed to raise and stabilise the river bank which was also returned to its previous alignment prior to the flooding.
  - The removal of substantial sections of the old flood embankments along the driveway to the private property 'Tomnagaske' to allow flood water from the Water of Ruchill to flow across the floodplain and back into the river further downstream.
  - Works to raise road levels on the driveway to the private property 'Tomnagaske' to create a new flood embankment at Camp Road which is tied into existing flood defences on the western perimeter of Dalginross.
  - Additional storage space was created for the community sandbag store at Comrie Fire Station.
- 5.3 The works were substantially completed in May 2013 and will be regularly inspected and maintained by the Council in the future.

# **Schemes Being Promoted**

- 5.4 As noted in the previous report to Committee in March 2012, the distribution of the flood component of General Capital Grant changed. The Scottish Government initially allocated funding to support any on-going flood schemes and a small number of outstanding schemes that already had approval under the 1961 Act. Perth & Kinross Council had no such schemes.
- 5.5 Any remaining government funding is to be allocated to schemes which have statutory consent under the 2009 Act. Local authorities will be required to make an application to receive a share of the remaining funding. Those

- schemes that meet the government's criteria will receive grant funding of up to 80% of eligible capital costs. No date has been set for funding applications.
- 5.6 The current arrangements do not apply to flood schemes of less that £2M in value. Local authorities are expected to fund any such schemes themselves.
- 5.7 It is understood that the future capital funding arrangements for flood schemes are currently being discussed by the Scottish Government and COSLA. However no details are available at present.
- 5.8 Clearly the issue of funding support from central government will continue to have a significant bearing on when the Council will be able to deliver such schemes in the future. Although this report highlights the Council's intention to promote flood protection schemes in a number of areas, there continues to be uncertainty over whether these schemes will be delivered.

# Schemes where the Council has made some Funding Provision

# Almondbank Flood Protection Scheme

- 5.9 Almondbank was severely flooded from the River Almond and East Pow Burn in January 1993 and further flood events have occurred in September 1999, December 1999 and January 2011. Flood defences are required to protect several groups of houses, the Vector Aerospace workshops, Lochty Industrial Estate, a trout farm and the bowling club.
- 5.10 The scheme involves a combination of flood walls and embankments, raising three bridges to improve conveyance, a flood storage area on the playing fields next to Main Street, drainage improvements and pumping stations.
- 5.11 The Council's Environment Committee of 7 September 2011 agreed to publish the scheme under the 2009 Act. As noted in the report to Committee at that time, the responses to the earlier public consultation of June and July 2011 would be used to inform the scheme proposals. The required minor revisions were made and the scheme was finalised. The scheme was subsequently published under the Flood Risk Management (Scotland) Act 2009 on 2 July 2013 and is currently proceeding through the statutory process.
- 5.12 Subject to the scheme being confirmed under the 2009 Act and the grant funding situation being clarified, consultants will be re-engaged to progress the detailed design.

# **Schemes Awaiting Funding**

5.13 The schemes listed below are being promoted and, if they remain economically viable and funding becomes available, will be prioritised and

constructed once consents are secured. The schemes are listed in order of priority.

# Comrie and Dalginross Flood Protection Scheme

- 5.14 Significant flood damage occurred in 1993 and again in 1997 as a result of flooding from the Water of Ruchill and River Earn. Further severe flooding occurred on 27 August and 19 November 2012 when the Water of Ruchill affected Dalginross.
- 5.15 The Council implemented flood protection works on the Water of Ruchill as described earlier in this section of the report. These works have reduced the risk of flooding to the Dalginross area from the Water of Ruchill, however the wider flood risk from the River Earn and the River Lednock remains.
- 5.16 A wider flood scheme is being promoted for the area involving a combination of flood walls, flood embankments and flood plain storage. Investigations into the scheme are continuing.

# Coupar Angus (Coupar Burn) Flood Protection Scheme

- 5.17 In August 2004, at least 6 properties in George Street were inundated as a result of flooding from the Coupar Burn. Further flooding occurred in December 2012.
- 5.18 The proposed scheme consists of a new flood wall to protect these properties.
- 5.19 The Council is currently in the process of re-engaging consultants to progress the scheme.

# Bankfoot Flood Protection Scheme

- 5.20 Widespread flooding from a wide variety of sources occurred in Bankfoot in 1993 and 2004. Overtopping of watercourses, blocked screens, collapsed culverts, a lack of capacity in piped/culverted watercourses and road drains as well as run off from surrounding fields all contributed to the problem. The worst affected properties were along Main Street, Dunkeld Road, Tulliebelton Place, Nicoll Drive and Prieston Road. In 2004 at least 16 properties were affected with 6 having flood water within the building.
- 5.21 Houses at Upper and Lower Gauls to the south of the village have also been affected by flooding in the past. A previous flood scheme for that particular area was not found to be economically viable but this is being reviewed as part of the current work.
- 5.22 The proposed flood scheme is still being developed but the initial conclusions are that some parts of the proposals will not be economically viable, whilst the benefit/cost ratio for others is very marginal.

- 5.23 A number of measures have been considered. On the Garry Burn, the proposals include localised flood walls and raising the existing bridge at Tulliebelton Road as well as a relief channel to divert flood water to the south of Bankfoot. The initial conclusions are that flood defences on the Glenshaugh Burn will not be economically viable. Drainage improvements will also be required to address flooding at Tulliebelton Road, Dunkeld Road and Main Street.
- 5.24 Progress on the flood scheme has been delayed by the response required to address other flood events but the investigations are due to be concluded shortly.

# Scone (Annaty Burn) Flood Protection Scheme

- 5.25 In 2004, sixteen properties on Perth Road, Burnside, Den Road and Abbey Road were flooded as a result of the Annaty Burn overtopping. Of the 16 properties affected, twelve had water enter the building.
- 5.26 The flood study recommends that the existing footbridges on the Annaty Burn and Goshenbank Park, as well as Burnside, be raised and that flood defence walls be provided.
- 5.27 No recent progress has been made on the scheme due to a lack of resources.

# Flood Protection Schemes Not Being Pursued Further

5.28 Flood studies showed that the following scheme which was previously identified could not be justified on economic grounds and will not be pursued any further.

# Greenloaning Flood Protection Scheme

- 5.29 Seven properties in Allandale Crescent, including the basement of the public house, were flooded in August 2004 as a result of the Millstone Burn overtopping at a nearby access bridge.
- 5.30 The initial flood study of December 2006 had indicated that a flood scheme may be economically viable and recommended enhancements to existing embankments along the Millstone Burn as well as raising access bridges and service pipes.
- 5.31 However, following more comprehensive investigations and consideration of alternative options, a flood scheme was not found to be economically viable and would also not provide the required minimum standard of protection to certain properties. The Environment Committee of 20 March 2013 agreed that the proposed scheme would not be taken forward and that it was not appropriate to undertake any further investigations into flooding at this location.

# Flood Studies Being Undertaken

# Milnathort Surface Water Investigation

- 5.32 Issues relating to surface water flooding have been the subject of a further flood study. The consultant's report on this study has concluded that there is an economically viable flood scheme.
- 5.33 The scheme proposals would involve a pumping station on Back Loan, localised property pumps to improve the capacity of existing drainage systems in the area, underground storage and other localised drainage improvements.
- 5.34 However as the estimated cost of the scheme is less than £2M, it would not attract Scottish Government grant funding. There is currently no means of funding the proposal without re-allocating resources from other projects. The Council is therefore not in a position to promote the scheme at this time without clarity over the funding arrangements.

#### Other Studies

- 5.35 Consultants are currently undertaking flood studies for the following areas:-
  - Meikleour, Caputh & Spittalfield (River Tay) consultants have concluded their investigations and a report will be submitted to the Council shortly.
  - South Kinross (South Queich, Gelly Burn and Clash Burn) a draft report has been submitted and is to be reviewed by the Council.
  - Feus Road, Perth (surface water flooding) this work is being taken forward jointly with Scottish Water.
  - Bridgend, Perth (surface water flooding)
  - Muthill (surface water flooding)

# Flood Studies Requiring Further Investigation

Consultants will be engaged to complete the following flood studies when funding becomes available.

#### Dunkeld

- 5.36 In August 2004, flood water overflowed from watercourses in Spoutwell Brae and Atholl Gardens, Dunkeld. Several properties were affected in Atholl Gardens and Atholl Street.
- 5.37 Consultants undertaking a flood study have recommended that further investigative work is needed to ascertain the condition and the capacity of the culvert in Atholl Street.

#### Pitlochry

5.38 In 2002, 7 properties were affected by flooding at three locations in Pitlochry, namely East Haugh of Ballyoukan, Altrory Burn and Middlehaugh of Dalshian.

- 5.39 Consultants undertaking the flood study have indicated that further investigative work is required to examine:
  - the surcharge from the culvert at Croftinloan
  - the lack of capacity of the culverts below the A9 Perth to Inverness road
  - the drainage in the field to the west side of the A9

before they can conclude on whether any defences may be justified.

#### Barrel Drain, Scone

- 5.40 An earlier flood study had concluded that a considerable length of drain required to be upgraded but that the cost of this would substantially be in excess of the potential cost of flood damages caused.
- 5.41 Following the recent localised failures on two sections of the Barrel Drain, it is the intention that the existing flood study will be re-examined updating, where necessary, the information contained therein to determine if, by factoring in the condition of the barrel drain, this would have any effect on the benefit/cost ratio of a flood scheme by any significant margin.
- 5.42 The Council will also look into the possibility of carrying out any smaller improvement works that could improve the flood resilience of the study area.

#### Flood Studies to be Undertaken

- 5.43 Consultants will be engaged to conduct flood studies at the following locations when funding becomes available:-
  - Aberfeldy
  - Logierait

#### 6 OTHER ACTIVITIES

6.1 The flood risk management planning work required by the 2009 Act will have to be closely coordinated with other areas which affect, or are affected by, flood risk management.

# Planning and Development Management

- 6.2 The primary objective in carrying out any risk assessment is to avoid the risk in the first place. Clearly if new developments could avoid areas of flood risk then that would benefit our communities. Land use planning decisions are therefore one of the most powerful tools available to manage flood risk.
- 6.3 The flood risk assessments, flood maps and plans produced under the 2009 Act will provide new information to allow planning authorities to consider future development. Flood risk management plans should therefore make links to Local Development Plans and vice versa, with the findings from each plan influencing the other in order to deliver multiple benefits.
- 6.4 Planning applications are currently considered within the context of the development plan and the Scottish Planning Policy. The Council is also working towards the adoption of a new Local Development Plan. These documents provide detailed criteria against which such applications are determined.
- 6.5 In the first instance the presumption is against development in areas of flood risk, with the onus being on the developer to prepare a detailed flood risk assessment and drainage impact assessment in support of their planning application to show that the development is not susceptible to flooding and will not increase flood risk elsewhere.
- 6.6 Any flood risk assessment is required to comply with current standards and will follow the model recommended by SEPA, COSLA and the Scottish Government. Due consideration is also given to the management of surface water by the inclusion of sustainable urban drainage systems (SUDS).
- 6.7 The Council's flooding team is consulted on planning applications in areas where there is a risk of flooding. The team provides technical advice to Planning to allow them to determine the application.
- 6.8 The flooding team also attends regular Transport Planning meetings to ensure that flood risk is adequately managed at all stages of development through the Planning and Road Construction Consent processes.
- 6.9 In order to support this process, the Council's flooding team has produced draft guidance for developers on flooding and drainage requirements within Perth & Kinross. This guidance is currently out to public consultation and can be viewed on the Council's website. It is anticipated that the final guidance will

be the subject of a future report to committee and will form part of the supplementary guidance within the Council's new Local Development Plan.

# Flood Officers Group

6.10 To ensure that major issues regarding flooding are discussed within the various Council departments, a Flood Officers Group has been established and meets every 6 months. This group currently consists of the Environment Service's flooding team and Planning staff.

# Raising Public Awareness

- 6.11 Whilst the various public agencies have responsibilities for flooding as outlined in this report, the primary responsibility for avoiding or managing flood risk still remains with land and property owners. Individuals, businesses and communities can play an important role in helping to reduce the impact of flooding. Obviously this must be supported through improved awareness and access to information on flood risk and the actions individuals can take.
- 6.12 The Council's flooding team have developed close working links with a variety of agencies including the Scottish Government, SEPA, Scottish Water, the Scottish Fire & Rescue Service and the Scottish Flood Forum to help deliver advice and assistance on flooding within the Council area.
- 6.13 The Council has acted to raise public awareness of the risk of flooding and provide advice on the measures they can take to help reduce flood risk. This work has been carried out in conjunction with the other public agencies noted above at various public open evenings and 'drop in' sessions. Below are some recent examples:-
  - Weekly drop in centres to support and offer advice to the local community in Comrie following flooding from the Water of Ruchill.
     Members of the public met with Council officers, SEPA, Scottish Fire and Rescue, Police Scotland and the Scottish Flood Forum.
  - Community meetings to allow members of the public to discuss flooding and community resilience issues in Greenloaning.
  - A community information event was held to allow the public to discuss flooding and issues surrounding the collapse of the barrel drain in Scone. Council officers, the Scottish Flood Forum, Scottish Water and SEPA attended.
  - Evening community meetings were held in Kinfauns to allow members of the public to discuss flooding issues, river bank ownership responsibilities and community resilience.
  - Class talk and field visit with Kirkmichael Primary School to explain the purpose, design and operation of the Perth flood scheme.
- 6.14 Public engagement is also a key element in the development of any study or scheme designed to manage flood risk and is carried out on an individual project by project basis.

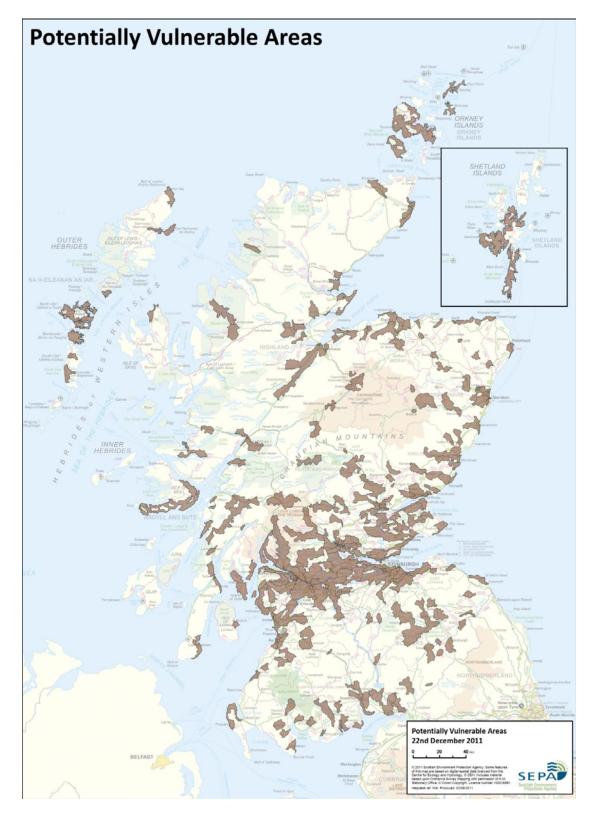
6.15 The Council's website contains information on the duties and responsibilities of the various organisations involved in flooding, as well as advice and support for individuals and businesses.

# Flood Resilience Groups

- 6.16 The Council, SEPA, the Scottish Fire & Rescue Service and the Scottish Flood Forum have formed a partnership aimed at reducing the risk of flooding to businesses and communities within Perth & Kinross. A steering group was set up to look at improved joint working before, during and after flooding and to develop ways of increasing community resilience against flooding.
- 6.17 Two pilot areas were initially set up in Perth city centre (aimed at making the business community more resilient to flooding) and in Aberfeldy. The pilots have helped to raise awareness of flood risk, promote flood resilience measures and plans and encourage residents and businesses to act through consideration of measures such as the use of property flood protection products.
- 6.18 A further pilot was also extended to Comrie following the severe flooding in August and November 2012.

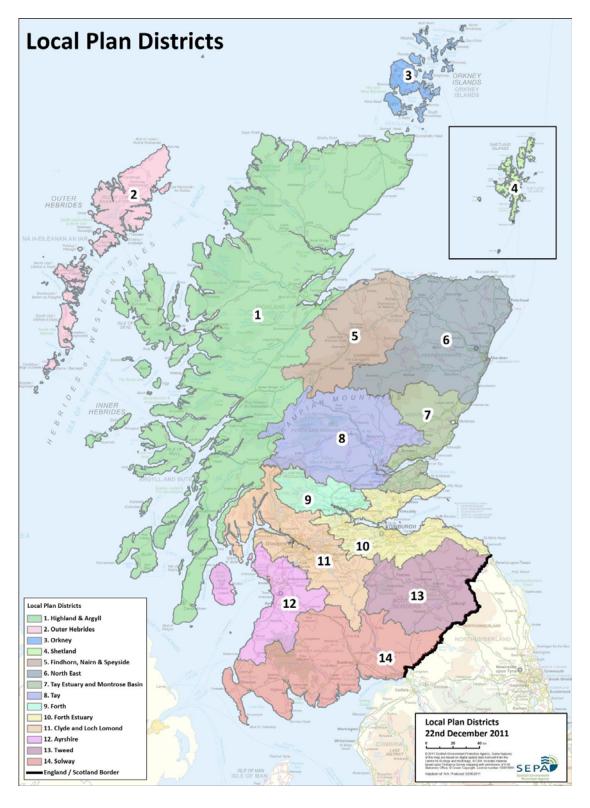
Appendix B1

# **Map of Potentially Vulnerable Areas**



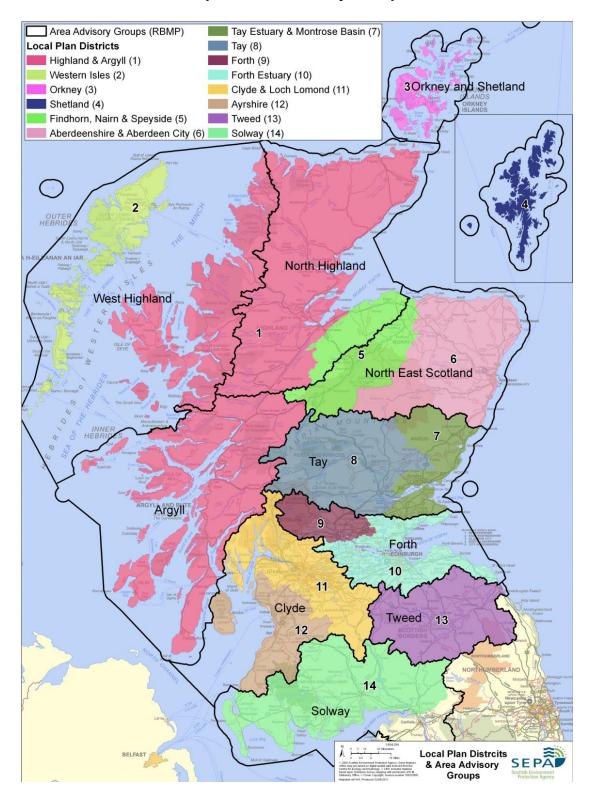
Appendix B2

# **Map of Local Plan Districts**



## **Appendix B3**

# **Map of Area Advisory Groups**



Appendix B4	
vember 2011	
of Flooding since No	
Incidences	

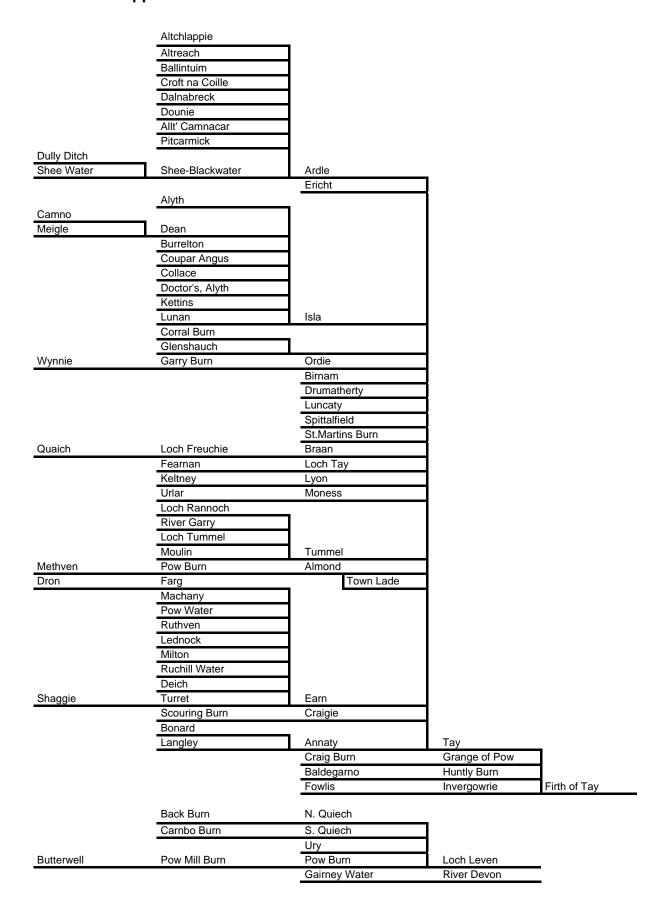
								<b>-</b>							
Notes	Vehicles still getting through	Private pumping arrangements protected 1 residential property	Clean up organised by Scottish Water due to presence of rags and sewer silt	Vactor unit deployed			Fire Service responded with pumps with PKC/TC assist	Clean up organised by Scottish Water due to presence of rags and sewer silt. Repeat of event 1 week previously	Roads closed off major Fire Service operation, sandbags supplied PKC/TC providing assistance	Supplied sandbags	Supplied sandbags	Fire & Rescue/PKC/TC/Police etc in attendance full emergency operation to evacuate residents. Pumps, floodsax and sandbags deployed.	Road closed	Erect signs	Provided sandbags
Extent	Water flowing over road at 150mm depth on two sections	2 commercial and 2 residential properties affected + footpaths and Stirling Road	Water up to 400mm deep in places - full width of road flooded	Ponding in garden and flow through house	Several gardens and local road affected	Solum and garage	Length of Rose Terrace	Water up to 400mm deep in places - full width of road flooded	Water flowed through a large area of Dalginross with people being rescued from their homes	Road drains blocked	Road and footway flooded	Water flowed through a large area of Dalginross affecting property/roads/gardens	Run off from adjacent land	Road flooded	Road flooded
Damage	Debris on road	Damage to garden and internal flooding to 1 commercial property	Several garages flooded and local road affected	Internal flooding to 1 property	Damage to gardens and road surface	1 unoccupied new build flood and road to 300mm	Several residential properties flooded (basements)	Several garages flooded and local road affected	Approximately 60 properties affected including internal flooding upto 600mm depth, garages, outbuildings and gardens.	Road and garden	Threatening property	Approximately 150 properties affected including internal flooding upto 600mm depth, garages, outbuildings and gardens.	Road flooded and landslip	Surface water	Road and garden
Source	River Tay/surface run off	Surface water	Craigie Burn + sewer surcharging	Surface water	Kirkton Burn	Surface water	Groundwater and sewerage	Craigie Burn + sewer surcharging	Water of Ruchill	Surcharging drains	Surface run off	Water of Ruchill	Surface water run off from adjacent land	Surface water run off	Surface water
Location	B846 Aberfeldy to Weem	Striling Road, Milnathort	Balmoral Place, Perth	Church Street, Perth	Kirkton Burn, Auchterarder	Bridge of Earn	Rose Terrace, Perth	Balmoral Place, Perth	Comrie (Dalginross)	Buchanan Place, Kinloch Rannoch	Davidson Chemist, Dunkeld	Comrie (Dalginross)	Ballinluig tulliemet	Tay Bridge Terrace, Aberfeldy	Balnaskeag, Kenmore
Date	05/01/2012	11/07/2012	11/07/2012	18/07/2012	18/07/2012	18/07/2012	18/07/2012	18/07/2012	27/08/2012	12/10/2012	12/10/2012	19/11/2012	20/12/2012	20/12/2012	20/12/2012

Date	Location	Source	Damage	Extent	Notes
20/12/2012	Angus Road, Scone	Surface run off and surcharging manhole	Flooding of property	Basement	Flooding from run off from Park and Ride and drainage system surcharging. Supplied pumps and sandbags.
20/12/2012	Croft Park, Perth	Backing up through drainage system.	Flooding of property	Basement	Supplied pump and sandbags
20/12/2012	Crieff Road Nursery, Perth	Backing up through drainage system.	Flooding of property	Road and School flooded	Supplied pump and sandbags
20/12/2012	20/12/2012 B954 at Crathies bridge	River Isla	Road flooded	150 metres due to river bursting banks	Road closed
20/12/2012	C423 at Cronan	River Isla	Road flooded	Due to river bursting banks	Road closed
20/12/2012	A923 Couttie Bridge	River Isla	Road flooded	Due to river bursting banks	Road closed diversion set up Road reopened 22/12/12
20/12/2012	C435 Leystone Road	Un named	Road flooded	Run off from fields and ditches	Road closed road - Open 22/12/12
20/12/2012	Lambourn Place	Un named	Road flooded	Run off from fields and ditches	Provided sandbags
20/12/2012	Greenburn Cottages, Coupar Angus	Un named	Water in to garden area and up to house	Run off from fields and ditches	Provided sandbags
20/12/2012	Alyth Road, Meigle	Meigle Burn	Flooding of property	Burn overtop	Provided sandbags
21/12/2012	High Street, Auchterarder	Drainage system couldn't cope.	t Flooding of property	Capacity issue	Supplied sandbags
21/12/2012	21/12/2012 U173 Old Amulree road	Surface runoff	Road flooded	Road surfce being washed of	Diverted water repair to road to carried out later
21/12/2012	Balnaskeag, Kenmore	Drains backing up	Road and garden	Road flooded	Provided sandbags gully emptier to clear drains
21/12/2012	Old Church Road, Pitlochry	Grid blocked water overtopping	Garden area	Grid blocked in ditch at foot of garden	Provided sandbags and cleared grid
21/12/2012	C424 Netherton road	Un named	Road flooded	road washed out	Closed road
21/12/2012	Back Road, Meigle	Meigle Burn	Garden area and out buildings flooded	Burn overtop	Provided sandbags
21/12/2012	Bridge of Crathies, Meigle	Meigle Burn	Garden area	Burn overtop	Provided sandbags

Date	Location	Source	Damage	Extent	Notes
21/12/2012	Pleasence Road, Coupar Angus	Un named	Garden area and into foundation of the house	Run off from surrounding fields	Provided sandbags
21/12/2012	High Street, Auchterarder	Surface water	Water entering house	Church property and road flooded	Sandbags supplied
22/12/2012	C435 Leystone Road	Un named	Road flooded	Run off from fields and ditches	Road closed at 20:00
22/12/2012	A94 Longlogie	Un named	Road flooded	Run off from fields and ditches	Signs erected
22/12/2012	B898 Dalguise road	Surface run off	Road flooded	Run off from adjacent land	Closed road
22/12/2012	St Ninians Court, Dunkeld	Water overtopping from ditch in Atholl Gardens	Road flooded	Run off from Athole Gardens	Supply sandbags
22/12/2012	B898 Dalgise	Surface water flooding	Road flooded	Road Closed	Road closed - Re-opened 24/12/12
22/12/2012	C445 Kirkinch road	Un named	Road flooded	Run off from fields and ditches	Road closed
22/12/2012	A923 Couttie bridge	River Isla	Road flooded	Due to river bursting banks	Closed road set up diversion
22/12/2012	U100 Hallyard road	River Isla	Road flooded	Due to river bursting banks	Road closed
23/12/2012	A926 New Alyth	Doctors Burn	Road flooded	Over topped grid	TC to clear grid
23/12/2012	23/12/2012 High St, Coupar Angus	Coupar Burn	Footway flooded	Over topped	Provided sandbags
23/12/2012	George St, Coupar Angus	Coupar Burn	Garden area and house flooded	Over topped	Provided sandbags and Tayside fire service in attendance.
23/12/2012	Candlehouse Lane, Coupar Angus	Coupar Burn	Road flooded	Backed up through road drainage and over topped	Road closed - Re-opened 24/12/12
23/12/2012	Athole Gardens, Dunkeld	Surface water flooding	Road flooded	Bringing debris down of hill	Supervisor to check
23/12/2012	A827, Grandtully	Groundwater	Basement flooded	Ground water flooding into basement of 1 commercial property	Supplied sandbags
23/12/2012	Portnasallan	Groundwater	Basement flooded	Ground water flooding into basement	Supplied sandbags
29/12/2012	Angus Road, Scone	Surface run off and surcharging from drainage systems.	Flooding of property	Basement	Flooding from Park and Ride run off supplied pump and sandbags
29/01/2013	C423 at Cronan	River Isla	Road flooded	Due to river bursting banks	Road closed

Notes	Supplied sandbags	Sandbags supplied	Road closed	Sandbags supplied	Supplied aqua sacks	J Hodgson to investigate - provided aqua sacks	Fire Service responded and built temporary flood embankment with help from local farmer	PKC/TC attended to clear footpath drainage	Arragement with property maintenance to clear grid on regular basis	Fire & Rescue attended. Sandbags available from store on Back Loan. More sandbags sent from Inveralmond	Sandbags and floodsax deployed.
Extent	Solum	Property flooded	Due to river bursting banks	Garage area flooded	Water running off road into garden	Water running of surrounding land and flooding garden area	Flow through village caused by large volume of debris in watercourse and at structures	Water into 2 adjoining basements and footpath flooded	Localised road and property flooding	Throughout ground floor of properties	Prevented from entering property by the use of floodsax
Damage	Property flooded	Water into steading property	Road flooded	Water into garage	Garden area	Garden area	Internal flooding to 2 properties	2 property basements flooded	1 property affected - solum	2 properties flooded	1 property threatened
Source	Surface water		River Isla	Surface water	Surface water	1	Langley Burn	Surface water	Surface water	Surface water runoff and back up of drains	Surface water runoff and back up of drains
Location	Tulliebelton Place, Bankfoot	Glenfoot Road, Abernethy	U100 Halyard road	17/04/2013 Glebe Square, Comrie	Dunkeld Road, Blairgowrie	Kinclaven	Burnfoot, Kinfauns	23/07/2013 County Place, Perth	Upper Woodlands, Perth	Milnathort	Milnathort
Date	29/01/2013	29/01/2013	30/01/2013	17/04/2013	23/06/2013	23/06/2013	18/07/2013	23/07/2013	23/07/2013	23/07/2013	28/07/2013

### Appendix B5: Main Watercourses in Perth & Kinross



Watercourse Assessments 2012/13 and Proposed Maintenance Works

Body of Water	Grid Ref	Description	Remarks	Freq. of Assessment	Clearance and Repair
Allan Water	904 091 - 899 092 (OS368)	Allan Water, Blackford	No Issues	Annual	None
Allan Water	898 087 - 892 093 (OS368)	Back Burn, Blackford	Sandbag debris lying in channel	Quarter	Remove sandbags
Allan Water	893 085 - 891 094 (OS368)	Danny Burn, Blackford	No Issues	Annual	None
Allan Water	838 088 - 832 101 (368)	Keir Burn	Some minor overgrown vegetation and overhanging trees. Also some slight erosion on right hand bank.	Bi-annual next assessment 24/12/2013	None
Allan Water	838 092 - 837 130 (368)	River Knaik	Minor erosion along banks not a significant issue. Tree across channel south of road bridge debris being trapped behind it	Quarterly next assessment 1/10/2013	Remove tree and clear trapped debris south of road bridge
Allan Water	837 070 - 834 078 (366)	Millstone Burn	Some overhanging vegetation and trees but no issues.	Annual	None
Black Water	136 586 - 135 587 (381)	Dully Ditch (A93)	Some siltation at channel and outlet. Some debris collecting around wire across channel.	Annual	Monitor debris trapped around wire and clear if required.
Black Water	140 517 - 143 515 (387)	Bridge of Cally Strone Village hall.	Overgrown vegetation and overhanging trees. There is siltation in one of the culverts and the screen is in poor condition.	Annual	Monitor and take action as necessary.
Dean Water	288 448 - 285 456 (OS 381)	Meigle Burn, Meigle	No Issues	Annual	None
Dean Water	269 402 - 274 405 (OS 381)	Den Burn, Keillor	Culverts overgrown - not currently an issue	Annual	Monitor and clear if required.
Dean Water	287 458 - 282 456 (OS 381)	Dean Water	No Issues	Annual	None
Dean Water	283 425 (OS 381)	Camno Burn 2	Fallen trees in channel	Annual	To be monitored

Dean Water	267 425 (OS 381)	Camno Burn 1	Debris in channel	Annual	To be monitored
	272 395 (OS 381)	Baldowrie Burn	No Issues	Annual	None
	353 301 - 344 314 (OS380)	Invergowrie Burn	No Issues	Annual	None
	172 034-178 038(OS369)	Easter Balgedie	No Issues	Annual	None
	172 050 - 168 047(OS369)	Glenlomond	Fallen trees in watercourse	Annual	None
	178 024 - 171 039(OS369)	Kinnesswood	Area behind garage overgrown	Annual	Vegetation and any debris to be cleared.
	162 040 - 160 839(OS369)	Wester Balgedie 1	No Issues	Annual	None
	163 040 - 162 037(OS369)	Wester Balgedie 2	No Issues	Annual	None
	166 040 - 166 040(OS369)	Wester Balgedie 3	No Issues	Annual	None
	130 040 - 128 051(OS369)	Burleigh Burn	No Issues	Annual	None
	152 059 - 153 060(OS369)	Butterwell Burn	No Issues	Annual	None
	139 042 - 141 045(OS369)	Camel Burn	No Issues	Annual	None
	156 041 - 156 037(OS369)	Pow Burn	Fallen trees at culvert outlet	Annual	tree debris to be removed
	100 051 - 130 040(OS369)	Back - Fochy Burn	No Issues	Annual	None
	122 018 - 114 021	Clash Burn	Debris in Channel, Silted culverts	Annual	Debris to be removed, culverts to be cleared
	313 035 - 310 044	North Queich	No Issues	Annual	None
	124 016 - 091 028	South Queich	Banks eroded in places	Annual	None
	109 030 - 100 034	Ury Burn	Localised debris in channel	Annual	Debris to be removed

Loch Leven	059 003 - 139 990(OS369)	Gairney Water	Screen fallen off culvert inlet	Annual	Existing screen to be replaced
Loch Rannoch	612 593 - 609 588(OS386)	Allt a Creagain Odhair1	No Issues	Annual	None
Loch Rannoch	663 589 - 664 587(OS386)	Allt Mor2	No Issues	Annual	None
Loch Rannoch	665 592 - 665 587(OS386)	Kinloch Rannoch Burn3	No Issues	Annual	None
Loch Rannoch	674 576 - 676 578(OS386)	Innerhadden Burn4	No Issues	Annual	None
Loch Rannoch	689 574 - 692 576(OS386)	Tempar Burn5	No Issues	Annual	None
Loch Tay	615 365 - 616 362(OS 51)	Allt a Mhoirneas 1	No Issues	Annual	None
Loch Tay	717 446 - 716 444(OS 51)	Boreland 2	No Issues	Annual	None
Loch Tay	618 366 - 618 362(OS 51)	Burn of Edramucky 3	No Issues	Annual	None
Loch Tay	620 365 - 619 363(OS 51)	Edramucky Tributary 4	No Issues	Annual	None
Loch Tay	721 448 - 721 445(OS 51)	Fearnan 5	Debris in watercourse	Annual	Debris to be removed
Loch Tay	726 447 - 726 447(OS 51)	Fearnan Ditch 6	No Issues	Annual	None
Loch Tay	625 366 - 625 363(OS 51)	Greenacres Ditch 7	No Issues	Annual	None
Loch Tay	676 398 - 679 398(OS 51)	Lawers Burn 8	No Issues	Annual	None
Loch Tay	678 398 - 679 398(OS 51)	Lawers Burn Tributary 9	No Issues	Annual	None
Loch Tay	755 441 - 757 435(OS 51)	Acharn Burn 1	No Issues	Annual	None
Loch Tay	737 431 - 736 429(OS 51)	Achianich 2	No Issues	Annual	None
Loch Tay	753 436 - 753 435(OS 51)	Allt Ruadh 3	No Issues	Annual	None

Loch Tay	667 353 - 667 358(OS 51)	Ardeonaig Burn 4	Fallen trees and debris in burn	Annual	Trees and debris to be removed
Loch Tay	699 393 - 706 392(OS 51)	Ardtalnaig Burn 5	No Issues	Annual	None
Loch Tay	708 408 - 707 408(OS 51)	Brachen Lodges 6	No Issues	Annual	None
Loch Tay	728 427 - 707 408(OS 51)	Creag Mhor Quarry 7	Culvert under road is blockedwith rubble and debris. No flood risk to property	Annual	Culvert to be unblocked
Loch Tay	711 413 - 712 412(OS 51)	Kepranich Un-named 18	No Issues	Annual	None
Loch Tay	712 415 - 714 414(OS 51)	Kepranich Un-named 29	No Issues	Annual	None
Loch Tay	763 438(OS 51)	Remony Burn 10	No Issues	Annual	None
Loch Tay	761 438 - 761 439(OS 51)	Remony Burn Triburary 11	No Issues	Annual	None
Loch Tay	709 409 - 708 409(OS 51)	Shenlarich Un-named 12	Debris blockage	Annual	Debris to be removed
Loch Tummel	815 603 - 816 609	Allt a Bheithie	Overgrown vegetation along banks and in channel made inspection difficult. Not issues at present.	Annual	None
Loch Tummel	768 594 - 768 593	Dalcroy Cottages	Sediment build up and damaged culvert	Annual	Monitor and clear if required
Loch Tummel	875 614 - 883 612	Glenfincastle Burn	Build up of garden waste on banks.	Annual	Monitor and notify landowner if required
Loch Tummel	764 594 - 766 591	Holiday Park Burn	Mior sediment and vegetation issues and culvert 2 and 5	Annual	Monitor and notify landowner if required
Loch Tummel	768 594 - 768 593	Loch Tummel Drain 1	No issues	Annual	None .
Loch Tummel	761595 - 764591	River Tummel	No issues	Annual	None
Loch Tummel	819 603 - 819 601	Strathtummel Burn	No issues	Annual	None
Loch Tummel	778 576 - 779 579	Allt Kynachan	No issues	Annual	None
Loch Tummel	789 578 - 788 581	Allt Tarruinchon	No issues	Annual	None
Loch Tummel	797 584 - 798 585	Foss Home Farm	No issues	Annual	None
			Some overgrown vegetation along channel		Works order issued to
River Ardle	083 599 - 085 603 (387)	Allt Clappy	and banks but not an issue. Some debris	Annual	clear culvert. No further
			around culvert.		works.

River Ardle	083 599 - 085 605 (387)	Allt Camnacar, Lair of Glenshee	Clear	Annual	None
River Ardle	041 638 (387)	Straloch House Ditch	One side of culvert blocked and other pipe damaged but this has not changed since 2012.	Annaul	Monitor but no action yet.
River Ardle	123 521 - 122 519 (387)	South Cally Lodge Culvert	Very overgrown could not see culvert for assessment. Road could be affected but no properties near by	Annual	None
River Devon	047 006 - 046 010/044 007 (OS 369)	Lilybank, Drum	Culvert partially blocked	Annual	Monitor culvert and possibly clear
River Devon	040 005 - 045 003 (OS 369)	Muirfield, Drum	No Issues	Annual	None
River Devon	016 982 - 022 982 (OS 369)	Gairney Burn, Powmill	No Issues	Annual	None
River Devon	029 998 - 036 006 (OS 369)	River Devon	Large build up of debris in channel and collapsed bridge in water	Annual	No flood risk, continue to monitor
River Devon	017 996 - 017 994 (OS 369)	Rumbling Bridge	No Issues	Annual	None
River Devon	036 003 - 038 005 (OS 369)	036 003 - 038 005 (OS 369) Thorny Burn, Crook of Devon	No Issues	Annual	None
River Earn	923 242 - 930 239 (OS 368)	Fowlis Wester North, Fowlis Wester	No Issues	Annual	None
River Earn	885 234 - 889 241 (OS 368)	Un-named burn, Gilmerton	Overgrown vegetation in channel	Annual	Works ordered issued for clearance of vegetation - July 2013
River Earn	885 235 - 886 238 (OS 368)	Bog Burn, Gilmerton	No Issues	Annual	None
River Earn	895 200 - 893 198 (OS 368)	Mills Hills Bridge	No Issues	Annual	None
River Earn	927 238 - 924 237 (OS 368)	New Fowlis	Fallen trees in channel	Annual	Does not pose flood risk - continue to monitor
River Earn	873 223 - 876 210 (OS 368)	Unknown river, Crieff	No Issues	Annual	None
River Earn	882 252 - 878 249 (OS 368)	lbert Burn, Monzie	Pallets stuck under bridge	Annual	Pallets to be removed
River Earn	878 253 - 878 251 (OS 368)	Shaggie Burn, Monzie	Overgrown vegetation in channel	Annual	Vegetation to be removed

Passed to landowner for maintenance	Owner of farm clear burn themselves	No maintenance needed - does not pose flood risk	Flood defence system in place - continued monitoring	Vegetation and any debris to be cleared.	None	None	Vegetation and any debris to be cleared.	None	No flood risk posed by	this culvert. No action to	De lakell	None	None	None	None	None	None	None	None	None	None
Annual	Annual	Annual	Quarterly	Annual	Annual	Annual	Annual	Annual		Annual		Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Biannual next assessment December 2013	Annual
Collapsed wall on channel bank	Overgrown vegetation in channel	Overgrown vegetation on banks	Overgrown vegetation on banks	Very overgrown on banks at points, could not gain access to one culvert	No Issues	Very overgrown on banks at points, could not gain access to one culvert	Debris in watercourse under bridge and very overgrown on banks at points, could not gain access to one culvert	No Issues		Culvert One covered by large rock		No Issues	No Issues	No Issues	Overgrown vegetation along banks and in channel. Not an issue at present.	Some overgrown vegetation and slight siltation in channel.	Some overgrown vegetation and overhanging trees both banks. Some minor erosion left hand bank.				
Turret Burn, Crieff	Broadhaugh Poultry Farm burn	Lednock River, Comrie	Water of Ruchill, Comrie/Glen Artney	Duncrub Burn	Dunning Burn	Gallows Knowe	Latch Burn	Marcassie Burn		Nethergarvock Burn		Baptism Well 1	County Place 2	Rossie House 3	Strathallan 4	Ardargie - Culteuchar Burn 1	River Earn - Forteviot Bridge 2	Water of May 3	Baiglie Burn	Yellow Burn (Clayton Road)	Dron Burn (Lower)
853 242 - 856 216 (OS 368)	852 212 - 854 211 (OS 368)	776 221 - 772 226 (OS 368)	772 218 - 765 197 (OS 368)	013 151 - 015 151 (OS369)	020 152 - 026 134(OS369)	016 142 - 014 141(OS369)	014 143 - 010 137(OS369)	021 139 - 021 135(OS369)		029 146 - 029 154(OS369)		087 183 - 086 185 (OS 369	087 180 - 087 179(OS 369)	086 184 - 084 162(OS 369)	090 184 - 089 183(OS 369)	073 160 - 081 156 (OS369)	045 183 - 045 183(OS369) I	049 179 - (OS369)	157 157 - 154 156 (369)	134 182 - 135 179 (369)	137 156 - 144 159 (369)
River Earn	River Earn	River Earn	River Earn	River Earn	River Earn	River Earn	River Earn	River Earn		River Earn		River Earn	River Earn	River Earn	River Earn	River Earn	River Earn				

None	None	Debris requires to be removed from bridge face. Footbridge condition should be highlighted to bridge	No action currently required. Owner should be notified about bridge	None Monitor and clear if required.	Re-assess area of failed banking in 3 months. Cut back vegetation on South side of bridge. Owner of weir to be informed of damage.	Remove debris and thin vegetation as necessary.  Monitor vegetation and clear as required.
Annual	Annual Annual	Annual	Quarterly next inspection November 2013	Annual Annual	Annual assessment however area of landslip should be monitored 3 monthly.	Annual
Overgrown vegetation and overhanging trees both banks. Some erosion along the left handside and both bridges have vegetation in the centre channel. There is also vegetation on the weir face. No significant risk posed.	Generally clear and running well some debris in channel but not obstructing flow. Overgrown vegetation both banks and in channel. Heavily vegetated in channel between culverts and culvert requires	Right hand bank eroding some debris in channel but not likely to cause flooding.	Overgrown vegetation both banks.  Vegetation and debris in channel. One culvert inspection is partially blocked and a second culverts  November	Some overgrown vegetation and overhanging trees. Not currently an issue.	There has been a landslip on the bankside should it enter the water may be an issue if slips into water. Ovegrown vegetation south of bridge. Problems with weir north of footbridge.	Overgrown vegetation both banks. Debris and overgrown vegetation in channel. Channel very overgrown - may require attention in the future.
Dron Burn (Upper)	Diech Burn Trinity Gask (Crieff South)	River Earn Kinkell Bridge Section (Crieff South)	Muthill	Annadale -Rattray Rattray Burn - Davie Park	River Ericht	Westfield Play Park Bailey Bridge, Middle Maus Farm
154 163 - 157 166 (369)	126 174 - 133 185 (369) 956 180 - 957 175 (368)	930168 - 003 177 (368)	868 167 - 873 169 (368) 870 165 - 873 169 (368)	189 459 192 465 - 190 453 (381)	195 446 - 182 453 (381)	178 464 - 180 465 (381) 171 482 (381)
River Earn	River Earn River Earn	River Earn	River Earn	River Ericht River Ericht	River Ericht	River Ericht River Ericht

Fallen trees should be removed at some point.	Work order issued for clearance of fallen trees. No further action required.	None None None	None	None None None	Removal of grass and vegetation from culvert	None	Owner to be notified	Passed to estate to thin vegetation.	None	None	Monitor and replace if required	Clearance of trees and tree debris	Continue to monitor.	None	None	None	None
Annual	Annual	Annual Annual Annual	Annual	Annual Annual Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
Fallen trees in channel no serious risk but consideration should be given to removing them in the future.	Overgrown vegetation and overhanging trees, some fallen trees and debris in channel. Fallen tree in arch of bridge.	No Issues No Issues No Issues	No Issues	No Issues No Issues No Issues	Culvert blocked with grass from upstream, above road.	No Issues	Footbridges in bad condition - broken and loose slats	Banks and channel heavily vegetated causing out of bank flow in heavy rainfall	No Issues	Some minor debris in channel not causing flood risk	Broken screen	A lot of debris throughout channel causing blockages at points.	Wall on RH side damaged at one point	No Issues	No Issues	No Issues	No Issues
South Morganstone Burn (A93)	Morganstone Burn (A93)	Calfford Bridge Duncrievie - Lossley Burn Glendeuglie	Ladeside	River Farg Wallace Park Banvie Burn, Blair Atholl	Calvine drain (big), Calvine	Falls of Bruar, at House of Bruar, Blair Atholl	Fender Burn, Blair Atholl	Kingisland Burn	Mill Lade	River Tilt	Calvine drain (small), Calvine	Alyth Burn 1 - from Tully bridge to Springbank Alyth Burn 2 - From Banff	Road, along Springbank and finishes in fields.	Back Burn, Alyth		Watercourse at Johnshill Road, Alyth	Ditch at Netherton, Alyth
170 489 - 172 491(381)	165 494 - 166 494 (381)	137 098 -139 096(OS 369) 141 091 - 134 090 131 105 - 129 107	133 105 - 135 106(OS 369)	160 130 - 164 150(OS 369) 133 100 - 136 100(OS 369) 686 654 - 868 653 (OS386)	805 662 - 804 656 (OS386)	821 663 - 824 659 (OS386)	877 667 - 883 668 (OS386)	887 646 - 888 649 (386)	875 656 - 872 651 (386)	874 648 - 876 666 (386)	806 659 - 804 656 (OS386)	244 486 - 227 489 (OS381)	244 487 - 258 846 (OS381)	243 490 - 249 491 (OS381)	244 478 - 238 478 (OS381)	243 486 - 236 483 (OS381)	266 462 - 267 460 (OS381)
River Ericht	River Ericht	River Farg River Farg River Farg	River Farg	River Farg River Farg River Garry	River Garry	River Garry	River Garry	River Garry	River Garry	River Garry	River Garry	River Isla	River Isla	River Isla	River Isla	River Isla	River Isla

Minor sediment management, thinning of vegetation and removal of debris	Clear vegetation from culvert inlet and outlet.	Cut back vegetation.	No action currently required. Owner should be notified about bridge condition.	None	None	None	None	None	None	None	None	None	None	tree debris to be	removed	None	None							
Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	-	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
minor sediment build up at bridge inlets, overgrown vegetation and debris on banks and in channel	Entrance to culvert overgrown with vegetation culvert could not be assessed.	Some erosion along the channel, overgrown vegetation around culvert and along the banks.	Overgrown vegetation and overhanging trees along left hand bank. Slight debris build up at bridge and a small footbridge looks in disrepair.	No Issues	No Issues	No Issues	Residents dumping grass cutting into burn under bridge	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	Flooding issuea at Crannog centre should be	looked into and tree debris removed from watercourse	No Issues	No Issues							
Coupar Angus Burn	Millburn Culvert	Thorn House Culvert	Wellsies Burn - Woodside	Allt Bhrachain	Allt Ghallabhaich	Innerwick - Allt a Mhuic	Allt Odhar	Bridge of Balgie	Chesthill - Allt Linntich	Coshieville	Garth House	Invervar Burn	Keltney Burn	- - - -	Allt a bhealaich	Allt na Ceardaich	Balnaskeag	Balnaskeag 2	Balnaskeag 3	Croft na Caber	Mains of Taymouth	Manse Cottage	Watercourse at Alma Avenue, Aberfeldy	Watercourse at Hawthorn Cottage, Aberfeldy
209 383 - 225 401(381)	211 479 - 210 481 (381)	232 467 (381)	201 373 - 206 (375)	621 481 - 621 477(OS51)	587 478 - 588 472 (OS51)	587 478 - 588 472 (OS51)	737 474 - 738 468(OS51)	576 467 - 574 468(OS51)	698 472 - 699 474(OS51)	776 494 - 779 493(OS51)	757 476 - 758 474(OS51)	665 484 - 665 481(OS51)	774 793 - 774 489(OS51)		/84 454 - /83 456(US3/8)	776 481 - 778 448(OS378)	774 449 - 775 448(OS378)	774 452 - 775 439(OS378)	777 452 - 777 451(OS378)	772 448 - 770 447(OS378)	771 459 - 773 462(OS378)	774 448 - 772 449(OS378)	853 487 - 853 456 (OS386)	862 489 - 862 488 (OS386)
River Isla	River Isla	River Isla	River Isla	River Lvon	River Lyon	River Lyon	River Lyon	River Lyon	River Lyon	River Lyon	River Lyon	River Lyon	River Lyon	ŀ	Kiver I ay	River Tay	River Tay							

Tree removal	None	None	None	None	None	None	Removal of vegetation	None	None	Assess screen damage and replace if required	None	None	None	Clear vegetation at	Monitor and clear if required	Clear vegetation at culvert
Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Bi-annual	Bi-annual	Annual	Annual	Annual		Annual
Stones in culvert - not causing blockage. Fallen tree in river near outfall.	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	Very overgrown on banks at points, could not gain access to one culvert	No Issues	No Issues	Screen needing replaced at bridge	No Issues	No Issues	No Issues	Overgrown vegetation at culvert	Woodland debris and vegetation in channel - not currently an issue	Culvert overgrown - could not inspect
Un-named outfall at Kenmore Road, Aberfeldy	Moness Burn, Aberfeldy	Watercourse at Moness Country Club, Aberfeldy	Un-named watercourse, Aberfeldy	Well Burn, Aberfeldy	Un-named drain in Balnacraig, Aberfeldy	dy	Weem Drain, Weem, Aberfeldy	Camserney Burn, Aberfeldy	Tributary to Camserney Burn, Aberfeldy	Glenshauch Burn, Bankfoot	Garry Burn, Bankfoot	Stanley Mills, Stanley	Spittalfield Burn, Spittalfield	Ninevah, Murthly	Mill Road burn, Stanley	B9099 culvert, Stanley
850 489 (OS386)	854 487 - 855 485 (OS386)	859 484 - 860 485 (OS386)	859 495 - 859 486 (OS386)	867 481 - 867 496 (OS386)	868 506 - 869 505 (OS386)	854 499 - 853 498 (OS386)	848 497 - 837 494 (OS386)	814 494 - 818 489 (OS386)	820 492 - 821 494 (OS386)	055 363 - 072 342 (OS 379)	054 354 - 069 351 (OS 379)	113 329 - 116 329 (OS 380)	108 408 - 113 407 (OS 380)	115 379 - 114 380 (OS 380)	111 329 - 113 329 (OS 380)	106 333 - 106 336 (OS 380)
River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay

River Tay	084 202 - 084 201 (OS 369)	Milltown Burn, Aberdalgie	No Issues	Annual	None
River Tay	093 218 - 119 223 (OS 369)	Craigie Burn, Perth	No Issues	Bi-annual	None
River Tay	076 206 - 076 205 (OS 369)	Cotton Burn, Perth	No Issues	Annual	None
River Tay	108 213 - 111 216 (OS 369)	Candy Craig Knowe Drain, Perth	Large brick in front of culvert	Bi-annual	Monitor and remove brick if necessary
River Tay	082 224 - 098 226 (OS 369)	Scouring Burn, Perth	Culvert partially blocked with rubble	Bi-annual	Monitor and clear rubble if necessary
River Tay	043 280 - 099 268 (OS 369)	River Almond, Perth	No Issues	Annual	None
River Tay	029 262 - 028 261 (OS 369) F	029 262 - 028 261 (OS 369) Rorrie Terrace Drain, Methven	Burn full of vegetation and debris/litter	Annual	Burn to be cleared
River Tay	022 258 - 023 257/024 265 - 019 253 (OS 369)	Methven Burn and tributary	No Issues	Annual	None
River Tay	058 274 - 071 265 (OS 369)	Gelly Burn, Pitcairngreen	No Issues	Annual	None
River Tay	066 251 - 068 256 (OS 369)	East Pow, Huntingtower	No Issues	Bi-annual	None
River Tay	118 252 - 129 255 (OS 369)	Annaty Burn, Perth	No Issues	Annual	None
River Tay	142 240 - 142 240 (OS 369)	Muirfield Drain, Perth	No Issues	Annual	None
River Tay	135 249 - 139 246 (OS 369)	Langley Burn, Perth	No Issues	Annual	None
River Tay	128 243 - 130 243 (OS 369)	Gannochy Drain, Perth	Broken screen needing replaced	Annual	Assess condition of screen and replace if necessary
River Tay	144 234 - 150 225 (OS 369)	Deuchny Burn, Perth	Culvert blocked by tree debris	Annual	Clear debris from culvert
River Tay	124 233 - 131 233 (OS 369)	Bellwood Park burn, Perth	Silted culvert	Annual	Monitor and clear if required
River Tay	078 202 (OS 369)	Aberdalgie Drain, Perth	No Issues	Annual	None
River Tay	070 257 - 120 237 (OS 369)	Town Lade, Perth	Debris and vegetation throughout channel, becoming silted towards the Tay	Bi-annual	Continue to monitor - works may be required next year

None	None	None	None at the moment.	None	Works order issued to clear vegetation from culvert inlet. Further thinning of vegetation may be required.	Monitor vegetation and trees replace screen if available and speak to landowner re cut trees.	None	Debris requires to be removed from bridge face. Footbridge condition should be highlighted to bridge owner.
Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
Overgrown vegetation and overhanging trees both banks. Some overgrown vegetation in channel. Proximity of property made access difficult on sections. There was a small pond near the burn which was in poor condition.	Some overgrown trees along the banks and overgrown vegetation in places along the channel not a significant issue.	Some overgrown vegetation and overhanging trees along left hand bank, not an issue.	Overgrown vegetation and overhanging trees along both banks. Some sediment build up occurring in channel and vegetation growth. Should be monitored.	Some overgrown vegetation along both banks and in channel. Overhanging trees along right hand bank burn still running.		Overgrown vegetation, overhanging trees and erosion along both banks. Some overgrown vegetation in channel. Screen removed and loose cut branches on bank may cause a problem if fall into burn.	Some overgrown vegetation along banks and in channel but not an issue.	Overgrown vegetation, overhanging trees and erosion along both banks. Some vegetation in channel but generally clear. Small foot bridge in direpair and debris build up at bridge face.
Burrelton Burn	Kettins Burn	Strelitz Burn Burrelton	Cambusmichael Burn, Guildtown	Hallroom Burn - Guildtown	School Road Burn - Guildtown	Collace Burn - Collace	Wester Buttergask Culvert	Waukmill Lade near Stormontfield
200 369 - 206 365 (380)	242 394 - 238 393 (380/381)	198 368 - 199 369 (380)	132 315 - 137 317 (380)	135 319 - 138 322 (380)	242 394 - 238 388 (380)	205 323 - 203 325 (380)	212 340 - 211 342 (380)	106 291 - 106 296 (379)
			132	135	242	205	212	106
River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay	River Tay

River Tay	993 465 - 996 466 (OS 379)	Allt a Mhadaidh, Dunkeld	No Issues	Annual	None
River Tay	992 476 - 989 477 (OS 379)	Dalguise Burn, Dalguise	Silt in channel	Annual	Silt to be removed next year
River Tay	989 476 - 995 478 (OS 379)	Dalguise House, Dalguise	No Issues	Annual	None
River Tay	992 468 - 995 469 (OS 379)	Easter Dalguise burn, Dalguise	No Issues	Annual	None
River Tay	033 423 - 021 411 (OS 379)	Inchewan Burn, Dunkeld	Footbridge damaged and unstable	Annual	Pass to private landowner for maintenance
River Tay	989 474 - 994 474 (OS 379)	Middleton Burn, Dalguise	No Issues	Annual	None
River Tay	988 487 - 993 487 (OS 379)	Milton of Kincraigie	Blockage downstream	Annual	Does not pose a flood risk - continue to monitor
River Tay	027 433 - 026 431 (OS 379)	Sawmill Brae Burn, Dunkeld	Debris upstream of sawmill and damaged screen needs replaced	Annual	Debris to be cleared and new screen installed by March 2014
River Tummel River Tummel River Tummel	899 643 - 898 627(OS 386) 912 629 -913 630(OS 386) 911 616 - 913 615(OS 386)	Allt Chluain Allt Girnaig Tenandry	Blockage upstream of properties Blockage upstream of properties No Issues	Annual Annual Annual	Debris to be removed Debris to be removed None
River Tummel	971 552 - 976 557 (OS 386)	Pitcastle Burn, Pitlochry	No Issues	Annual	None
River Tummel	979 552 - 977 549 (OS 386)	Lochbroom Burn, Pitlochry	No Issues	Annual	None
River Tummel	971 561 - 965 555 (OS 386)	Knockdarroch, Pitlochry	No Issues	Annual	None
River Tummel	965 583 - 949 574 (OS 386)	Edradour Burn, Pitlochry	No Issues	Annual	None
River Tummel	955 568 - 958 573 (OS 386)	Donavourd 2, Pitlochry	No Issues	Annual	None
River Tummel	957 565 - 958 566 (OS 386)	Croftinloan burn, Pitlochry	No Issues	Annual	None
River Tummel	966 564 - 964 562 (OS 386)	Ballyoukan 2, Pitlochry	No Issues	Annual	None

None	Works order issued for removal of debris and screen clearance	None	None	None	Debris in channel to be cleared and replacement of screen	None	Debris to be cleared from burn	None	Clear vegetation from banks	None	Notified responsible party	None	Monitor and notify landowner if required None None
Annual	Annual	Annual	Bi-annual	Annual	Annual	Annual	Bi-annual	Annual	Annual	Annual Annual	Annual	Annual	Bi-annual Annual Annual
No Issues	Debris in channel and screen blocked with debris and vegetation	No Issues	No Issues	No Issues	Channel overgrown and blocked screen	No Issues	Debris in parts of the watercourse	No Issues	River bank very overgrown	No Issues	Damaged footbridge on caravan site, rotten and loose slats.	Some areas of debris and sediment build up but channel generally clear	Areas of sedimentation due to ongoing building works No issues No issues
Ballyoukan 1, Pitlochry	Un-named burn, Ballinluig Stone Circle, Pitlochry	Ballinluig burn, Pitlochry	Balintyler burn in Ballinluig, Pitlochry	Balchandy burn, Pitlochry	Wester Kinnaird burn and tributary, Pitlochry	The Culic burn, Pitlochry	Moulin Burn, Pitlochry	Kinnaird Burn	Donavourd 1, Pitlochry	Kirkton Burn, Auchterarder Ruthven Burn, Auchterarder	Ruthven Water, Auchterarder	South Queich	Un-named Burn through Carnbo Dis-used Lade Dis-used Lade
974 572 - 959 563 (OS 386)	975 534 - 977 534 (OS 386)	981 526 - 976 524 (OS 386)	981 529 - 976 528 (OS 386)	972 557 - 968 554 (OS 386)	952 592 - 946 579 (OS 386)	936 592 - 937 585 (OS 386)	941 577 - 943 613/974 606 (OS 386)	957 594 - 946 576 (OS 386)	956 575 - 954 572 (OS 386)	936 133 - 941 138 (OS368) 950 124 - 964 137 (OS368)	975 150 - 976 156 (OS368)	124 016 - 091 028	054 031 - 053 033 054 031 - 053 030 051 030 - 048 032
River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	River Tummel	Ruthven Water Ruthven Water	Ruthven Water	South Quiech	South Quiech South Quiech South Quiech

Maintenance Works (April 2012 - September 2013)

Body of Water	Area/Location of Works	Description of Works	Date Complete
Drainage systems	Various Locations (Blairgowrie Area)	CCTV investigation, condition assessment and clearance works	Oct-11
Garry and Glenshauch Burn	Bankfoot	Culvert replacement and repair and clearance of flood risk debris	Oct-11
Craigie Burn	Queens Avenue Reach	Clearance of flood risk debris	Nov-11
Drainage system	Perth	CCTV investigation, condition assessment and clearance works	Nov-11
Drainage system	Milnathort	Clearance works	Nov-11
Craigie Knowes Burn	Perth	Clearance of flood risk debris	Nov-11
Un-named watercourse	Forgandenny	Repair of collapsed culvert	Dec-11
Drainage system	Auchterarder	CCTV investigation, condition assessment and clearance works	Feb-12
Drainage systems	Various Locations	CCTV investigation, condition assessment and clearance works	Feb-12
Allt a Mhorness	Erdamucky	Clearance of flood risk debris	Mar-12
Annaty Burn	Scone	Clearance of flood risk debris	Mar-12

Body of Water	Area/Location of Works	Description of Works	Date Complete
Back Burn	Alyth	Clear debris from inlet to culvert	Mar-12
Barrell Drain	Scone	CCTV investigation and condition assessment	Mar-12
Barrell Drain	Scone	CCTV investigation and condition assessment	Mar-12
Burrleton Burn	Burrleton	Clearance of flood risk debris	Mar-12
Clash Burn	Milnathort	Clearance of flood risk debris from watercourse	Mar-12
Coupar Burn	Coupar Angus	Clearance of flood risk debris from watercourse	Mar-12
Deich Burn	Bridge of Earn	Clearance of flood risk debris from watercourse	Mar-12
Meigle Burn	Meigle	Sediment management	Mar-12
Un-named watercourse	Forgandenny	Clearance of flood risk debris from watercourse	Mar-12
River Earn	Bridge of Earn	Replacement of flap valves	Mar-12
Cambusmichael Burn	Guildtown	Clearance of flood risk debris	Mar-12
Alyth Burn	Alyth	Clearance of flood risk debris	Mar-12

Body of Water	Area/Location of Works	Description of Works	Date Complete
Rattray Burn	Rattray	Clearance of flood risk debris	Mar-12
Un-named watercourse	Pitnacree	Clearance of flood risk debris from watercourse	Mar-12
Nethy Burn	Abernethy	Sediment works pre-trash screen installation	Apr-12
Drainage system	Wallace Crescent	CCTV investigation, condition assessment and clearance works	May-12
Deich Burn	Earnbank	Vegetation management	Jun-12
Drainage system	Bridgend Cross	Pre-survey work to allow CCTV crew access	Jun-12
Nethy Burn	Abernethy	Installation of trash screen and repair to headwall	Jun-12
Perth Town Lade	Ladeside	Sediment and vegetation management	Jun-12
Drainage system	Milnathort Town Centre	Drain clearance	Jul-12
Drainage system	Bridgend Cross	CCTV investigation, condition assessment and clearance works	Jul-12
Deich Burn	Bridge of Earn	Clearance of flood risk debris from watercourse	Sep-12
Drainage system	Bridgend Cross	CCTV investigation, condition assessment and clearance works	Sep-12

Body of Water	Area/Location of Works	Description of Works	Date Complete
Fochy Burn	Milnathort	Clearance of flood risk debris from watercourse	Sep-12
River Farg	River Farg	Clearance of flood risk debris from watercourse	Sep-12
Drainage system	Wardside, Muthill	CCTV investigation, condition assessment and clearance works	Nov-12
Langley Burn	Kinfauns	Sediment clearance work to culverted section	Nov-12
Barrell Drain	Scone	CCTV investigation and condition assessment	Dec-12
Sawmill Brae	Dunkeld	CCTV investigation, condition assessment and clearance works	Dec-12
Back Burn	Blackford	Sediment clearance work	Jan-13
Barrell Drain	Scone	CCTV investigation and condition assessment	Jan-13
Burleigh Burn	Milnathort	Clearance of flood risk debris from watercourse	Jan-13
Drainage system	Guildtown	CCTV investigation, condition assessment and clearance works	Jan-13
Drainage system	Blackford	CCTV investigation, condition assessment and clearance works	Jan-13
Drainage system	Alma Ave, Aberfeldy	CCTV investigation, condition assessment and clearance works	Jan-13

Body of Water	Area/Location of Works	Description of Works	Date Complete
Keithbank Culvert	Rattray	CCTV investigation, condition assessment and clearance works	Jan-13
Perth Town Lade	Almondbank	Sediment and vegetation management	Jan-13
Allt Na Ceardaich	Kenmore	Sediment clearance work to culverted section	Feb-13
Allt Clappy	Kirkmichael	Sediment clearance work to culverted section	Mar-13
Coupar Burn	Coupar Angus	Vegetation management	Mar-13
Craigie Burn	Perth Prison Reach	Sediment and vegetation management	Mar-13
Craigie Burn	Croft Park Reach	Sediment and vegetation management	Mar-13
Craigie Burn	Balmoral Place Reach	Sediment and vegetation management	Mar-13
Craigie Burn	Balmoral Place Reach	Repairs to bankside wall to reduce water seepage	Mar-13
Craigie Burn	Railway Arch Reach	Sediment and vegetation management	Mar-13
Craigie Burn	Queens Avenue Reach	Repair of bankside wall to reduce water seepage	Mar-13
Craigie Burn	South Inch Reach	Sediment and vegetation management	Mar-13

Body of Water	Area/Location of Works	Description of Works	Date Complete
Drainage system	Rattray	Repair to manhole access	Mar-13
Drainage system	Leetown	CCTV investigation and condition assessment	Mar-13
Drainage system	Cottown	CCTV investigation and condition assessment	Mar-13
Fearnan Burn	Fearnan	Sediment clearance work to culverted section	Mar-13
Fearnan Ditch	Fearnan	Sediment clearance work to culverted section	Mar-13
Inchewan Burn	Dunkeld	Clearance of flood risk debris from watercourse	Mar-13
Langley Burn	Langley Burn, Kinfauns	Sediment clearance work	Mar-13
Perth Town Lade	Ruthvenmill	Sediment and vegetation management	Mar-13
Un-named watercourse	Culvert at U117 - B9099	Clearance of flood risk debris from watercourse	Mar-13
Un-named watercourse	Wester Balgeddie	Sediment and vegetation management	Mar-13
Un-named watercourse	Easter Balgeddie	Sediment and vegetation management	Mar-13
Un-named watercourse	Forgandenny	Repair of culvert headwall	Mar-13

Body of Water	Area/Location of Works	Description of Works	Date Complete
Wester Kinnaird Burn	Pitlochry	Sediment clearance work	Mar-13
Annat Burn	North Loch Earn	Clearance of flood risk debris from watercourse	Apr-13
Back Burn	Blackford	Headwall and outlet improvement	Apr-13
Barrell Drain	Scone	CCTV investigation and condition assessment	Apr-13
Coupar Burn	Little Keithick	Clearance of flood risk debris from watercourse	Apr-13
Craigie Burn	Low Road, Perth	Sediment clearance work	Apr-13
River Earn	Forteviot Bridge	Clearance of flood risk debris from watercourse	Apr-13
River Earn	Crieff Bridge/ Comrie	Clearance of flood risk debris from watercourse	Apr-13
River Earn	Kinkell Bridge	Clearance of flood risk debris from watercourse	Apr-13
River Tay	Wades Bridge, Aberfeldy	Clearance of flood risk debris from watercourse	Apr-13
Un-named watercourse	Binn Culvert	Sediment clearance work	Apr-13
Un-named watercourse	Cultybraggan Culvert	Sediment clearance work	Apr-13

Body of Water	Area/Location of Works	Description of Works	Date Complete
Un-named watercourse	Bankhead Culvert	Sediment clearance work	Apr-13
Un-named watercourse	Tain Culvert	Sediment clearance work	Apr-13
Allt Shios	Finglen East	Clearance of flood risk debris from watercourse	May-13
Drainage system	Milnathort	CCTV investigation, condition assessment and clearance works	May-13
Drainage system	Guildtown	CCTV investigation, condition assessment and clearance works	May-13
Un-named watercourse	Finglen East	Clearance of flood risk debris from watercourse	May-13
Meigle Burn	Meigle	Sediment clearance work	Jun-13
School Road Burn	Guildtown	Clear debris from inlet to culvert	Jun-13
Un-named watercourse	Westfield Play Park, Rattray	Sediment and vegetation management	Aug-13
Smiths Brae Ditch	Bankfoot	Clear ditch and vegetation between Cairney Hill and Smiths Brae Culverts(Bankfoot)	Sep-13
Un-named watercourse	Keathbank Culvert, Rattray	Replacement of 21m length of suspected collapsed/poor condition culvert	Sep-13

## Flood Risk Management (Scotland) Act 2009

### **Local Plan District Governance Arrangements**

#### 1. Introduction

- 1.1 The Flood Risk Management (Scotland) Act 2009 (the 2009 Act) places duties on SEPA and responsible authorities to manage flooding in a sustainable manner. The responsible authorities are local authorities and Scottish Water and any other public bodies and office holders designated as such by the Scottish Ministers.
- 1.2 The 2009 Act sets out a framework designed to reduce flood risk across Scotland over time. SEPA and the responsible authorities must work together to produce a national flood risk assessment, flood risk and hazard maps and Flood Risk Management Strategies and Local Flood Risk Management Plans. This process is repeated every 6 years.
- 1.3 SEPA published Scotland's first national flood risk assessment on 22 December 2011. This identified 243 areas across Scotland considered to be at risk of flooding. These areas are designated as Potentially Vulnerable Areas (PVA's); Perth and Kinross has 19No PVA's. Refer to Appendix B1. 1 in 22 residential properties and 1 in 13 businesses across Scotland are considered to be at risk of flooding.
- 1.4 For the purposes of managing flood risk, Scotland has been divided up into 14 local plan districts (LPD's) which take account of hydrological river catchment boundaries, local administrative boundaries and coastal areas. Refer to Appendix B2. Each LPD has a lead local authority. SEPA will produce a Flood Risk Management Plan (commonly referred to as the 'Strategy') for each district and the Lead Local Authority will produce a Local Flood Risk Management Plan.
- 1.5 In July 2011, the Scottish Government nominated Perth & Kinross Council as the lead local authority for the Tay LPD. The Council's area also falls into three other districts as follows:
  - Forth (lead local authority: Stirling Council);
  - Forth Estuary (lead local authority: City of Edinburgh Council);
  - Tay Estuary and Montrose Basin (TEAMB) (lead local authority: Angus Council).
- 1.6 Section 27 of the 2009 Act places a duty on SEPA to prepare Strategies for the management of flood risk within the PVA's identified in the national flood risk assessment. These Strategies will describe

- the measures to manage flood risk to be applied at a local level which will be detailed in the Local Flood Risk Management Plans.
- 1.7 Section 34 of the 2009 Act places a duty on lead local authorities to prepare Local Flood Risk Management Plans to describe how the measures described in the Strategy will be implemented.
- 1.8 The 2009 Act requires that draft Strategies and the corresponding supplementary parts of Local Flood Risk Management Plans be put to public consultation in December 2014.
- 1.9 The final Strategies must be published by December 2015 and the Local Flood Risk Management Plans must be published by June 2016.

#### 2. Local Plan District Partnerships

- 2.1 Under Sections 1 and 39 of the 2009 Act, SEPA and responsible authorities have a duty to adopt an integrated approach by cooperating with each other so as to co-ordinate the exercise of their respective functions. It is therefore essential that all parties adopt partnership working to deliver their responsibilities.
- 2.2 While formal LPD Partnerships are not explicitly required by the 2009 Act, they are considered to be necessary to enable the responsible authorities to comply with their duties.
- 2.3 Local authorities are already used to working in partnership with one another to deliver a joint goal, and there are many examples of how such partnerships can work. However the LPD's vary in nature. They range from those with one local authority to those with ten or more. Some cover island areas, some cover large areas of rural land whilst others cover urban areas. Some local authorities are predominantly in one LPD while others (such as Perth & Kinross) are in up to four.
- 2.4 For the above reasons, there is no 'one-size-fits-all' approach to partnership working. Some may delegate the decision making role to the lead local authority while others see this as a co-ordination and facilitation role only. Some will work in an informal manner while others have implemented a memorandum of understanding or a more formal contractual agreement. It has been left to each of the partner local authorities to come to an agreement on suitable arrangements that work for them.
- 2.5 SEPA's February 2012 publication "Flood Risk Management Planning in Scotland: Arrangements for 2012-2016" suggests three possible types of partnership arrangement as described in Appendix C1.
- 2.6 As the Tay LPD only consists of 4 local authorities, Option (i) a simple partnership model has been proposed. All the member authorities of

the Tay LPD have discussed the various governance options and have agreed on a simple partnership. This is similar to the proposed partnership arrangements in the other three LPD's that Perth & Kinross Council are involved in.

- 2.7 In order to move the FRM process forward, LPD Partnerships were set up in early 2012. To date the partnerships have consisted of SEPA, Scottish Water, the Lead Local Authority and other local authorities.
- 2.8 The Tay LPD Partnership meets every 8 weeks. PKC also attend meetings of the other 3 LPD partnerships at similar intervals. Joint meetings are held between the Tay and Forth LPD's in order to reduce the number of meetings and improve efficiency.

#### 3. Governance and Working Arrangements

- 3.1 It is important that partnership working is underpinned by a clear governance and decision making framework. The governance arrangements should promote accountability and co-ownership of the Flood Risk Management Strategies and Plans among all partners.
- 3.2 In order to formalise the working arrangements within the partnerships, governance arrangements have been developed for each LPD, including a structure and terms of reference, as follows.

#### Tay Local Plan District

- 3.3 The proposed governance arrangements for the Tay LPD are shown in Appendix C2. The structure consists of the following:-
  - A Steering Group to oversee all work that will result in the delivery of the Tay Local Flood Risk Management Plan. This Group is mainly made up of those directly involved in flood risk management, i.e. representatives from the flooding teams from local authorities, Scottish Water and SEPA.
  - Project Groups to deliver projects and provide specialist input as required. Project groups are currently proposed to consider surface water management planning, land use planning, communications and strategic environmental assessment.
  - A Board made up of Heads of Service to meet only when called on to resolve any disputes that may arise.
  - Local Authority Committees and SEPA/Scottish Water Boards to approve the final outputs from the process.
- 3.4 These arrangements have been agreed in principle at meetings of the Tay LPD Partnership but now require to be formally ratified by Perth and Kinross Council. Once this is in place, a letter will be issued to SEPA, Scottish Water and the other local authority members to invite them to formally ratify the governance arrangements.

- 3.5 It is requested to appoint a Head of Service to the Board of the Tay LPD Partnership (and the other LPD Partnerships that Perth and Kinross Council is a member of). Keith McNamara, Head of Environmental and Consumer Services has been nominated for this role.
- 3.6 As some uncertainty remains as to how the implementation of the FRM process will develop, the proposed governance arrangements will be reviewed at regular intervals and must be flexible enough to allow for future change.

#### Tay Local Plan District: Member Officer Working Arrangements

- 3.7 The 2009 Act sets a number of challenging statutory deadlines. Much of the work involves new science that has never been carried out before and SEPA have reported some delays in their mapping and approval process. This has reduced the remaining time available for local authorities to prepare their Local Flood Risk Management Plans. The timescales for the delivery of the flood risk management process are therefore now very tight.
- 3.8 One of the key risks that has been identified in this process is the requirement for all 32 local authorities, Scottish Water and SEPA to agree to the Flood Risk Management Strategies and Plans and to achieve the appropriate Committee approval of them to meet the statutory deadlines. The critical issue is therefore how each LPD Partnership aims to achieve the necessary sign off at key stages in the appraisal process.
- 3.9 There is a risk that what is signed off by officer groups is rejected at a later stage. Given SEPA's current programme, it is unlikely that there will be any time for committees to reject the proposed Plans or to revisit them. Hence there is a clear need to consult and secure agreement on the details as early as possible so that final committee approval is a formality.
- 3.10 Within Perth and Kinross Council at present, it can take at least 8 weeks to gain Committee approval and this can take longer if TESMT (or other) approvals are required.
- 3.11 In order to facilitate this process, obtain advice and gauge the views of elected members more quickly, it is proposed that discussions be held at Environment Committee Convener/Vice Convener meetings between the Head of Service (or Service Manager) and representatives of the Council's Flooding Team.
- 3.12 Angus Council currently have a Member Officer Working Group in place and they have reported that this arrangement works well.

#### Forth Local Plan District

- 3.13 The Proposed Forth LPD Partnership governance structure and terms of reference are shown in Appendix C3.
- 3.14 Stirling Council has written to the members of the Forth LPD Partnership asking them to ratify their governance arrangements.
- 3.15 In the meantime the Committee is asked to note the proposed governance arrangements for the Forth LPD Partnership.

#### Forth Estuary Local Plan District

- 3.16 The proposed Forth Estuary governance structure and terms of reference are shown in Appendix C4.
- 3.17 It is understood that City of Edinburgh Council are to write to member local authorities shortly asking them to formally ratify the proposed governance arrangements.
- 3.18 In the meantime the Committee is asked to note the proposed governance arrangements for the Forth Estuary LPD Partnership.

#### Tay Estuary & Montrose Basin Local Plan District

- 3.19 The proposed TEAMB governance structure and terms of reference are shown in Appendix C5.
- 3.20 The Committee is asked to note the proposed governance arrangements for the Tay Estuary & Montrose Basin LPD Partnership.

#### 4. Autonomous or Shared Resources

- 4.1 One particular challenge for local authorities will be to reduce the costs of implementing the 2009 Act by sharing systems or services.
- 4.2 Some lead local authorities have looked to partner authorities to contribute to the costs incurred in carrying out their role. This could be a financial contribution or each local authority could provide support in the form of seconded staff, the use of joint facilities or equipment. There may also be the option of jointly funded post or posts within the lead local authority for project management or producing the Local FRM Plan.
- 4.3 There are therefore two potential options for LPD Partnership funding:-
  - Autonomous Resources each member authority retains their full allocation of revenue funding to fund their responsibilities;

- Shared Resources member authorities pool part of their revenue funding allocation to fund a central specialised resource.
- 4.4 The Forth LPD and Forth Estuary LPD Partnerships currently include an element of cost sharing with the member local authorities paying a proportion of the lead local authority's staff costs.
- 4.5 Perth & Kinross Council have not entered into these arrangements for the following reasons:-
  - The Council intends to contribute staff time in kind but would not propose to contribute funding to the lead local authority of any or all of the local partnerships we participate in.
  - As the Lead Authority for the Tay LPD we do not currently intend to ask for financial contributions from the other members of the LPD partnership. This would simply result in moving money around between local authorities and would create an administrative burden.
  - The Scottish Government has already provided funding directly to Local Authorities for this purpose.
  - The Council has already recruited new staff to the flooding team and is therefore not in a position to commit funding to further new posts in other local authorities.

This is similar to the position adopted by Angus Council as the lead local authority for the TEAMB LPD Partnership.

4.6 Obviously the Council would require to contribute to the implementation of any identified flood management measures and the studies, design work, etc required to support this, where it can be demonstrated that there is a benefit to Perth & Kinross.

#### 5. Flood Risk Management Planning - Key Outputs

- 5.1 There are three key stages to the development and delivery of the FRM Strategies by SEPA and their consultants:-
  - 1. Catchment Characterisation
  - 2. Objective Setting
  - 3. Short Listing

The key stages are described in more detail in Appendix C6.

5.2 Whilst officers from each local authority will be involved in the development of the outputs at these stages, a decision on the level of approval required on behalf of each responsibility authority needs to be determined. The Lead Local Authority has a broader responsibility to manage the risk of delays from awaiting such approvals as this may

impact on the preparation and subsequent publication of the Local Flood Risk Management Plans.

- 5.3 The draft dates for the delivery of the key outputs from SEPA's consultant are as follows:-
  - 1. Catchment Characterisation 6 January 2014;
  - 2. Objective Setting 13 January 2014;
  - 3. Short Listing 10 June 2014.

Following delivery of these outputs, the LPD Partnership members are required to agree to them and seek the appropriate level of approval on behalf of their respective responsible authorities. Once agreement has been reached on the content of the Strategies, SEPA will then be able to undertake the required formal consultation by December 2014.

- 5.4 Note that once LPD Partnerships approve these key outputs SEPA will immediately move to the next stage at their own risk and will not wait for local authorities to secure any necessary committee approvals. If this results in any of the key outputs having to be revisited, then this will be undertaken at a later stage.
- 5.5 It is proposed that the following levels of approval are adopted by Perth & Kinross Council:
  - 1. Catchment Characterisation by Officers;
  - 2. Objective Setting by TESMT (following discussion with the Environment Committee Convener/Vice Convener);
  - 3. Short Listing Report to Environment Committee (following discussion with TESMT and the Environment Committee Convener/Vice Convener);
- 5.6 Thereafter, the consultation drafts of the Council's Local Flood Risk Management Plans will be reported to the Environment Committee.

#### **Types of Partnership Arrangements**

- (i) Simple Partnership individual local authorities approve decisions; the lead local authority co-ordinates the partnership. This option would suit LPD's where there is a small number of local authorities, where there is little record of joint working or for geographically dispersed/diverse districts.
- (ii) Joint Working Group a working group of elected members and officials from all partner local authorities, SEPA and Scottish Water. Recommendations would be made for approval by individual local authorities. The group would be chaired by the lead local authority. This option would suit LPD's where there are between 2 and 6 local authorities where there is familiarity and joint working approaches in place.
- (iii) Joint Committee a formal arrangement to delegate powers to a joint committee of local authorities who would have delegated powers, e.g. for the approval of the Local Flood Risk Management Plan. This option would suit larger LPD's.

# Appendix C2

## Proposed Governance Structure and Term of Reference –

Tay LPD

#### **Tay Local Plan District: Proposed Partnership Structure**

# Local Authority Committee / Scottish Water / SEPA Board Approvals (as appropriate)

To facilitate decisions sign-off and the final sign-off from each individual Local Authority of the Tay Local Flood Risk Management Plan

#### LPD Board (Heads of Services)

To meet only when called on by the LPD Steering Group to resolve disputes in order to ensure the agreement of the Tay FRM Strategy and the delivery of the Tay Local Flood Risk Management Plan.

#### **LPD Steering Group (Senior Officers)**

To facilitate all work that will result in the agreement of the Tay FRM Strategy and the delivery of the Tay Local Flood Risk Management Plan.

#### **LPD Project Group**

To plan, execute and deliver projects and provide specialist input as required.

#### **LPD Project Group**

To plan, execute and deliver projects and provide specialist input as required.

#### **LPD Project Group**

To plan, execute and deliver projects and provide specialist input as required.

#### **Tay Local Plan District Terms of Reference**

#### Roles and responsibilities of the chairperson and members of all groups

#### Purpose / Role:-

To establish the overall responsibilities for the Chairpersons and Members of the Tay Local Plan District Partnership, and to clarify individuals' roles and duties.

#### **Ground Rules:-**

- 1. Start & Finish on time;
- 2. Arrive on time and stay the duration;
- 3. Mobile phones off / silent;
- 4. Open & honest participation;
- 5. Be flexible and support each other's progress;
- 6. Demonstrate commitment to delivery:
- 7. Individuals are responsible for actions (or inactions).

#### Role/Responsibilities:-

#### Tay LPD Group Chairperson role and responsibilities:

- 1. Chair each meeting and ensure meeting Agenda, Timetable and Ground Rules are followed:
- 2. Direct the proceedings, encourage participation from all those involved;
- 3. Ensure that future meetings are agreed and established in Tay LPD Members diaries. Manage any necessary changes to agreed meeting schedule;
- 4. Ensure a draft meeting Agenda is compiled and forwarded to Tay LPD Members 1 week in advance of any meeting; ensure any additional pertinent issues raised by Tay LPD Members are added to the meeting Agenda prior to distribution, or at least dealt with as AOCB;
- 5. Ensure all papers are circulated in advance of the meeting and that the agenda includes items for decision/discussion or information;
- 6. Ensure that Minutes and any Actions are recorded at each meeting and a draft version distributed within 2 weeks & final version distributed within 1 week of approval;
- 7. Ensure Group Members discharge their actions and tasks properly, and within agreed timescales.

#### Tay LPD Group Members role and responsibilities:

- 1. Attend all Steering Group meetings or at least ensure representation, i.e. send a delegate. Delegates must be briefed and prepared to participate in the whole meeting;
- 2. Prepare for and participate fully and proactively (i.e. listen and engage) in all discussions and activities (including reviewing all papers in advance of the meeting);
- 3. Fully undertake any tasks delegated by the Chair, within agreed timescales;
- 4. Undertake and complete any meeting actions within agreed timescales;
- 5. Adhere to meeting Ground Rules.

Terms of Reference: Tay Local Plan District Board		
Purpose / Role:- To meet only when called on by the Tay LPD Steering Group to resolve disputes in order to ensure the agreement of the Tay FRM Strategy and the delivery of the Tay Local Flood Risk Management Plan.		Meetings: (specify) - FREQUENCY As required VENUE Local Authority DURATION As required CHAIR LLA HoS
Responsibilities:- The detailed responsibilities of the Board members are to:  1. Consider and resolve issues escalated by the Tay LPD Steering Group, including disputes.		Inputs: (specify what an when may be required)  1. Agenda 2. Papers & reports 3. Presentations 4. Previous Board decisions  Members: (specify relevant senior representatives)  1No Head of Service from each Local Authority: Perth & Kinross Stirling Angus Fife and 1No senior representative from SEPA and Scottish Water.
Authority of the group:-	To resolve disputes in order to ensure the agreement of the Tay FRM Strategy and the delivery of the Tay Local Flood Risk Management Plan.	
Financial	Heads of Service and Senior Representatives will have delegated authority to approve funding.	
Approval	Any decisions arising out of the resolution of disputes.	
Changes	nanges Any changes resulting from the resolution of disputes.	
	ters relating to the agreement of Tay FRM Strategy and ood Risk Management Plan.	the development/delivery of

#### Terms of Reference: Tay Local Plan District Steering Group Purpose / Role:-Meetings:-To oversee, plan, facilitate and enable all work that will result in the FREQUENCY 3 monthly agreement of the Tay FRM Strategy and the delivery of the Tay Local **VENUE** Rotational Flood Risk Management Plan. To deal with all aspects of (Perth/Stirling) communications and stakeholder management. To provide technical **DURATION 2-3 hours** input and to oversee all project work. CHAIR Relevant Lead Local Authority Representative/s Inputs: (specify in general Responsibilities:terms)-The detailed responsibilities of the Tay LPD Steering Group are to: Agenda; 1. Establish partnership, agree Terms of Reference, Objectives and Requirements and ensure these are communicated and adhered 2. Previous meeting to: minutes: 2. Ensure the agreed objectives and requirements will fulfil the 3. Papers & Progress relative organisation's duties under the Flood Risk Management Reports; (Scotland) Act 2009; 4. Presentations; 3. Agree priorities and proposals for the Tay FRM Strategy and Tay 5. Board decisions: LFRMP; 6. Stakeholder issues; and 4. Agree the delivery mechanisms (e.g. partnership arrangements, 7. Project Reports. including level of involvement of each organisation, scope, governance, funding, accountability and roles and responsibilities) Members: (specify)for the FRM planning process; Officers from Local 5. Agree a work plan for delivery of the Tay FRM Strategy and Tay Authorities LFRMP, ensure its implementation and update regularly; Perth & Kinross Stirling 6. Ensure the appropriate resources are made available (information, Angus staff time, funding) for the timely delivery of the Tay FRM Strategy Fife and Tay LFRMP milestones; 7. Manage and report progress to the Board members, relevant Representatives from committee and other stakeholders: **SEPA** 8. Seek approval from Chief Officers/Board/Council Committee, as Scottish Water appropriate Other Attendees:-9. Manage communications and stakeholder management; As and when required 10. Undertake the procurement process for the appointment of Consultants/ Contractors/ Suppliers for shared commissions; 11. Receive, consider and appropriately 'act upon' the contents of project reports; 12. Establish and provide direction to Tay LPD Project Groups as required; and 13. Escalate issues and disputes to the Board if these cannot be resolved.

Authority:- Direction	To oversee, plan, facilitate and enable all work that will result in the agreement of the Tay FRM Strategy and delivery of the Tay Local Flood Risk Management Plan.	
Financial	Up to delegated limits of Steering Group Members; approval to be sought from appropriate organisation/s for greater amounts. Required to be agreed for measures taken forward and approval sought from appropriate organisation/s.	
Approval	Delegated authority of each organisation to be confirmed. Approvals to be sought from each organisation so as to ensure statutory deadlines are met.	
Changes	Any changes subject to the above Direction, Financial and Approval limits.	
Soonal All ma	Scape: All matters relating to the agreement of the Tay EPM Strategy and development/delivery of the	

**Scope:** All matters relating to the agreement of the Tay FRM Strategy and development/delivery of the Tay Local Flood Risk Management Plan.

Terms of Re	Terms of Reference: Tay Local Plan District Project Groups		
Purpose / Role:- To plan, execute and deliver the projects assigned to them by the Tay LPD Steering Group and provide specialist input as required in support of the delivery of the Tay FRM Strategy and Tay Local Flood Risk Management Plan.		Meetings:- FREQUENCY As required VENUE Local Authority DURATION As required CHAIR To be confirmed	
Responsibilities:-		Inputs:-	
<ol> <li>Plan, execu</li> <li>Provide pro programme</li> <li>Provide reg</li> </ol>	sponsibilities of the Tay LPD Project Groups are to: ute and deliver projects assigned to them; ject descriptions, costs, staff resource details and s for circulation to the Tay LPD Steering Group; ular and monthly project progress reports to the Tay	<ol> <li>Project brief from Steering Group;</li> <li>Delivery Programme;</li> <li>Best practice guidance;</li> <li>Legislation, including</li> </ol>	
<ul> <li>LPD Steering Group</li> <li>Coordinate their activities across partners;</li> <li>Identify issues, concerns and potential changes to projects and advise Tay LPD Steering Group;</li> <li>Ensure adequate resources are made available to deliver projects as planned;</li> <li>Identify financial requirements for delivery of projects and monitor spends.</li> </ul>		Regulations; 5. Studies; 6. Reports; and 7. Other information and data, as appropriate.  Members:- Specific to partner organisation. Technical specialists, as appropriate  Other Attendees:-	
Authority:- Direction  Direct activities of specific project activities in line with overall Programme		As appropriate.  overall Programme	
Financial Project specific – within contractual boundary/brief  Approval Project specific – within contractual boundary/brief			
Changes	Project specific – within contractual boundary/brief		
Scope:- Planni	ng, execution and delivery of specific projects.		

## **Arrangements for Review of Governance**

Governance arrangements to be reviewed on a 6 monthly basis.

# Appendix C3

## Proposed Governance Structure and Term of Reference –

### Forth LPD

#### Forth Local Plan District – Terms of Reference

#### Forth Local Plan District Groups - Responsibilities

#### Purpose / Role:-

To establish the overall responsibilities for the Chairpersons and Members of all Forth LPD Groups, and to clarify individuals' roles and duties.

#### **Meeting Ground Rules:-**

- 1. Start & Finish on time;
- 2. Arrive on time and stay the duration. This is dependent on Forth/Tay District business being discussed;
- 3. Open & honest participation silence is agreement;
- 4. Individuals responsible for actions;
- 5. Demonstrate commitment to delivery.
- 6. Individuals are responsible for actions (or inactions).

#### Role/Responsibilities:-

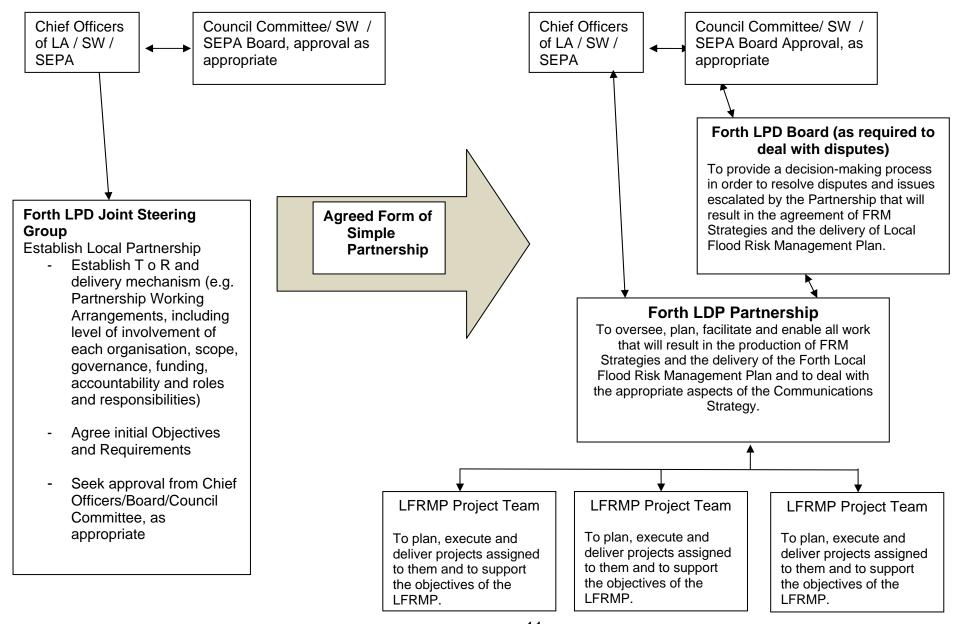
#### Forth LPD Group Chairperson role and responsibilities are to:

- Chair each meeting and ensure meeting Agenda, Timetable and Ground Rules are followed;
   If Joint Forth / Tay meeting is being held then the days business will be split and the Chair will change as required. The Agenda for all joint meetings to reflect separate items for each District;
- 2. Effectively and efficiently control and direct the proceedings, encouraging participation and active listening as and when required;
- 3. Ensure that a programme of meetings for the calendar year are agreed and are established in Group Members diaries. Manage any necessary changes to agreed meeting schedule;
- 4. Ensure a relevant, draft meeting Agenda is compiled and forwarded to Group Members by the Lead Local Authority Officer 1 week in advance of any meeting; Ensure any additional pertinent issues raised by Group Members are added to the meeting Agenda prior to distribution, or at least dealt with as AOCB;
- 5. Chair person to ensure that a Minutes Secretary is provided for all meetings;
- 6. Ensure the PM is present to take any Actions/Minutes at the start of each meeting;
- 7. Ensure that meeting Actions/Minutes are robustly recorded and DRAFT distributed within 2 working days & FINAL distributed within 1 week of approval;
- 8. Ensure Group Members discharge their actions and tasks properly, and within agreed timescales.

#### Forth LPD Group Members role and responsibilities are to:

- 1. Attend all Group meetings or at least ensure representation i.e. send a delegate. Delegates must be briefed and prepared to participate in the whole meeting;
- 2. Prepare for and participate fully and proactively (i.e. listen and engage) in all discussions and activities (including reviewing all papers in advance of the meeting);
- 3. Fully undertake any tasks delegated by the Chair, within agreed timescales;
- 4. Undertake and complete any meeting actions within agreed timescales;
- 6. Adhere to meeting Ground Rules.

#### Forth Local Plan District – Terms of Reference



# Forth Local Plan District (LPD) – Forth LDP Partnership (incorporating \*Board as required to deal with disputes)

#### Purpose / Role:-

To oversee, plan, facilitate and enable all work that will result in the delivery of the Forth Local Flood Risk Management Plan. To facilitate partnership working between the partners leading to the production of FRM Strategies. To deal with appropriate aspects of the communications strategy.

The **Board** will meet when required\* to provide a decision making process in order to resolve disputes and issues escalated by the Partnership that will result in the agreement of FRM Strategies and the delivery of Local Flood Risk Management Plan.

#### Meetings:-

FREQUENCY – Quarterly or at major milestones, and \*Board as required to resolve disputes

VENUE – LA DURATION – 2 to 3 Hours

#### Responsibilities:-

The detailed responsibilities of the Partnership Group are to:

- 1. Agree and endorse Objectives and Measures and ensure these are communicated and adhered to:
- 2. Address organisational issues as necessary;
- 3. Agree co-funding & delivery mechanisms for mutually beneficial shared commissions;
- 4. Agree funding contributions for co-funded work;
- 5. As \*Board, consider and resolve disputes / submissions from the Partnership for approval;
- 6. Contribute to development of FRM Strategies
- Seek appropriate level of engagement and agreement from senior council representatives and council committees at critical stages of FRM Strategies and local FRM Plans
- 8. Seek and agree funding for implementation of the LFRMP;
- Seek council committee approval for delivery mechanism for the LPD Partnership, including the Terms of Reference and delegated authorities as appropriate.
- Ensure the agreed objectives and requirements will fulfil the relative organisation's duties under the Flood Risk Management (Scotland) Act 2009;
- 11. Agree priorities and proposals for the FRM Strategies and LFRMP;
- 12. Agree the recommended work plan for the production of LFRMP and ensure its implementation:
- 13. Ensure the appropriate resources are made available (information, staff time, money) for the timely delivery of the FRM Strategies and LFRMP milestones;
- 14. Manage and report progress to the Board members and relevant stakeholders;
- 15. Support and promote the communications strategy;
- 16. Receive, consider and appropriately 'act upon' the contents of project reports; and
- Establish and provide direction to the other project groups as required.
- 18. Ensure all activities are consistent with the agreed Objectives and Requirements;
- 19. Ensure all activities are consistent with best practice guidance;
- 20. Escalate issues to the Board Group as appropriate;
- 21. Recommend setting up other project groups;
- 22. Provide recommendations for Commission Proposals including technical briefs and appraise technical scope;
- 23. Prepare project review reports and make recommendations to the Board;

#### Inputs:-

- 1. Agenda;
- 2. Previous meeting minutes;
- 3. Papers & Progress Reports;
- Presentations (on request);
- 5. Board decisions;
- Stakeholder issues; and
- 7. Project Reports.

#### Members:-

1 representative from each LA (Lead Authority chair)

1 representative from SW-FRM team

1 SEPA Regional Representative

#### Other Attendees:-

As appropriate.

When the Board meets the Partnership members will be augmented by the following;

#### \*Board Members:-

1 senior representative from each LA

1 senior representative from SW

1 senior representative from SEPA

#### Other Attendees:-

As required

#### Forth Local Plan District – Terms of Reference

Flood Risk Management Plan.

scope.

Authority at Board Level:- Direction	Board members will have the appropriate authority delegated to them from their employers to resolve conflict and disagreements at LPD Partnership level in order to ensure that the FRM Strategies can be agreed and LFRMP is compiled and delivered on time.	
Financial	Board members will be able to approve expenditure, to a limit set by each organisation that will ensure adequate resourcing of the Partnership to compile and deliver the FRMP on time. The mechanism for determining this limit will be as set out in the Business Plan already agreed by each Local Authority's CEO.	
Approval	The Board members will be able to agree funding contributions for co-funded work. Where co-funded work is outsourced the Board members will be able to approve project award by the Lead Authority for the co-funded work all in line with council Standing Orders.	
Changes	Approve changes including scope or cost to a level set by agreement.	
Scope: All ma	Scope: All matters relating to the development / delivery of the Forth FRM Strategy and the Local	

Authority at **Partnership** Partnership members will have the appropriate authority delegated to them from their employers to ensure that the FRM Strategy can be agreed and LFRMP is Level:compiled and delivered on time. Direction Direct activities of other groups Partnership members will be able to agree funding levels needed to ensure Financial adequate resourcing of the Partnership in compiling and delivering the FRMP on time. These agreed amounts will then be put to the Board for approval. The mechanism for determining this limit will be as previously set out in the Business Plan already agreed by each Local Authority's CEO Partnership members will be able to agree funding contributions for co-funded Approval work. These agreed amounts will then be put to the Board for approval. Where cofunded work is outsourced the Partnership members will be able to recommend project award by the Lead Authority for the co-funded work, all in line with council Standing Orders, to the Board for their approval; Technical matters and scope. Changes Partnership members will be able to agree changes including scope or cost of works that are then submitted to the Board for approval; Technical matters and

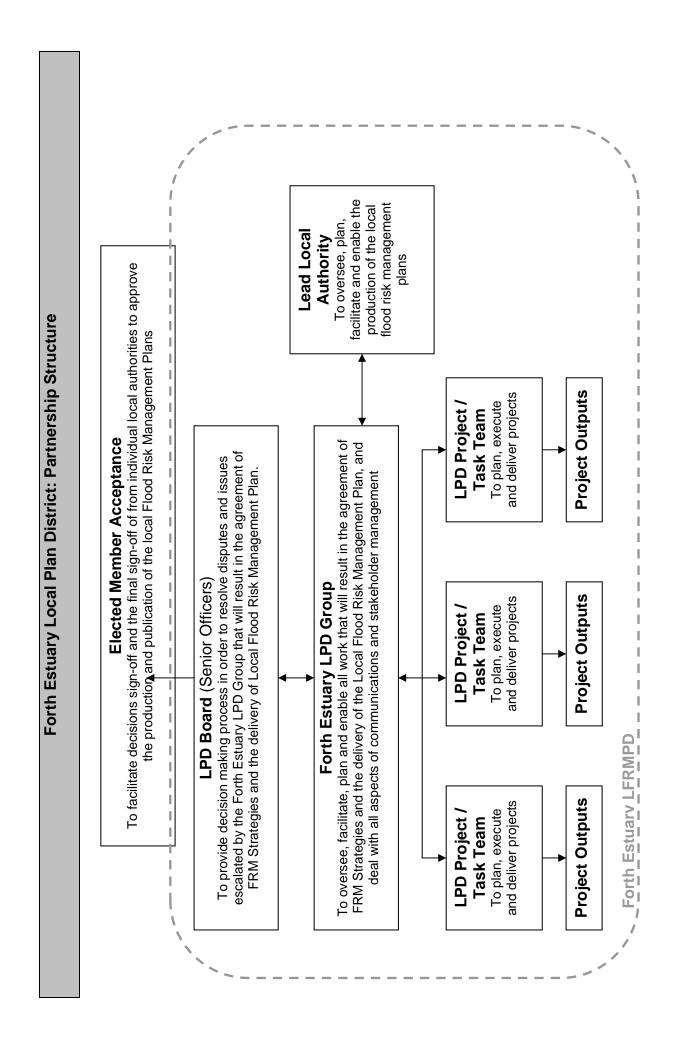
**Scope:** All matters relating to the development/delivery of the Forth Local Flood Risk Management Strategy. All matters relating to the development/delivery of the Forth Local Flood Risk Management Plan, based upon agreed objectives and requirements

# Forth Local Plan District – Terms of Reference

Forth Local Plan District Project Teams		
Purpose / Role:- To plan, execute and deliver projects assigned to them and to support the objectives of the Forth FRM Strategy and the Forth Local Flood Risk Management Plan.		Meetings:- FREQUENCY – as required VENUE – Most appropriate DURATION – as required
<ol> <li>Responsibilities:- The detailed responsibilities of the Project Teams are to:         <ol> <li>Plan, execute and deliver projects assigned to them;</li> <li>Provide project descriptions, costs and durations to the PM for circulation to the Partnership;</li> <li>Provide regular project progress reports to Partnership;</li> <li>Support the Partnership in its efforts to coordinate activities across partners;</li> <li>Identify issues, concerns and potential changes to projects and advise the Partnership;</li> </ol> </li> <li>Ensure adequate resources are made available to deliver projects as planned;</li> <li>Identify financial requirements for delivery of projects and monitor spends.</li> </ol>		Inputs:-  1. Project brief from Planning Group;  2. LFRMP Delivery Programme;  3. Best practice guidance;  4. Legislation, including regulations;  5. Studies;  6. Reports; and  7. Other information and data, as appropriate.  Members:- Specific to partner organisation.  Technical specialists, as appropriate  Other Attendees:- As appropriate.
Authority:- Direction	Direct activities of specific project activities in line with overall Programme	
Financial	Project specific – within contractual boundary	
Approval	Project specific – within contractual boundary	
Changes	Project specific – within contractual boundary	
Scope:- Planning, execution and delivery of specific projects.		

# Appendix C4

# Proposed Governance Structure and Terms of Reference – Forth Estuary LPD



#### Terms of Reference:

#### Forth Estuary Local Plan District - Responsibilities

#### Purpose / Role:-

To establish the overall responsibilities for the Chairpersons and Members of all Forth Estuary LPD Groups, and to clarify individuals' roles and duties.

#### **Ground Rules:-**

- 1. Start & Finish on time:
- 2. Arrive on time and stay the duration;
- 3. Mobile phones off / silent;
- 4. Open & honest participation silence is agreement;
- 5. Individuals responsible for actions;
- 6. Be flexible and support each other's progress;
- 7. Demonstrate commitment to delivery;
- 8. Individuals are responsible for actions (or inactions).

#### Role/Responsibilities:-

Forth Estuary Group Chairperson role and responsibilities are to:

- 1. Chair each meeting and ensure meeting Agenda, Timetable and Ground Rules are followed;
- 2. Effectively and efficiently control and direct the proceedings, encouraging participation and active listening as and when required;
- 3. Ensure that future meetings are agreed and are established in Group Members diaries. Manage any necessary changes to agreed meeting schedule;
- 4. Ensure a relevant, draft meeting Agenda is compiled and forwarded to Group Members 1 week in advance of any meeting; Ensure any additional pertinent issues raised by Group Members are added to the meeting Agenda prior to distribution, or at least dealt with as AOCB;
- 5. Ensure all papers are timeously circulated in advance of the meeting and that the agenda includes items for decision/discussion or information:
- 6. Ensure the LLA or delegate is present to take any Actions/Minutes at the start of each meeting;
- 7. Ensure that meeting Actions/Minutes are robustly recorded and DRAFT distributed within 5 working days & FINAL distributed within 2 weeks of approval;
- 8. Ensure Group Members discharge their actions and tasks properly, and within agreed timescales.

#### Forth Estuary Group Members role and responsibilities are to:

- 1. Attend all Group meetings or at least ensure representation i.e. send a delegate. Delegates must be briefed and prepared to participate in the whole meeting:
- 2. Prepare for and participate fully and proactively (i.e. listen and engage) in all discussions and activities (including reviewing all papers in advance of the meeting);
- 3. Fully undertake any tasks delegated by the Chair, within agreed timescales;
- 4. Undertake and complete any meeting actions within agreed timescales;
- 7. Adhere to meeting Ground Rules.

# Terms of Reference:

#### Forth Estuary Local Plan District - Board

#### Purpose / Role:-

To provide decision making process in order to resolve disputes and issues escalated by the Forth Estuary LPD Group that will result in the agreement of FRM Strategies and the delivery of Local Flood Risk Management Plan.

#### Meetings: (specify) -

FREQUENCY – as required in order to resolve disputes VENUE – LA offices DURATION – 2 to 3 hours

#### Responsibilities:-

The detailed responsibilities of the Board members are to:

- Endorse Objectives and Requirements agreed by the Local Plan District Group and ensure these are maintained and adhered to;
- 2. Address resource and organisational issues as necessary;
- 3. Agree co-funding mechanisms for shared commissions;
- 4. Agree funding contributions for co-funded work;
- 5. Consider and resolve issues escalated by the Local Plan District Group, including disputes;
- 6. Approve and secure funding for implementation of the LFRMP;
- 7. Approve/seek/recommend committee approval of FRM Strategy and local FRM Plan
- Approve/seek committee approval for delivery mechanism for the LFRMP, including the Terms of Reference and delegated authorities as appropriate.
- 9. Agree the delivery mechanisms (e.g. Partnership Working Arrangements, scope, governance, funding, accountability and roles and responsibilities) for the LFRMP.

#### Inputs:

- a. Agenda
- b. Relevant papers & reports
- c. Presentations (on request)
- d. Board decisions

#### Members:

- 1 Senior representative from each LA.
- 1 Senior representative from SW
- 1 Senior representative from SEPA

#### Other attendees:

As required Scottish Government (?)

Authority of the group:- Direction	Overall decision making must be delegated to individuals from employers as appropriate.
Financial	Overall decision making must be delegated to individuals from employers as appropriate.
Approval	Approve Local Plan District Group decisions.
Changes	Resolution of disputes and changes including scope or cost.

**Scope:-** All matters relating to the development/delivery of the Forth Estuary Local Flood Risk Management Plan.

#### Terms of Reference: Forth Estuary Local Plan District Group Purpose / Role:-Meetings:-To oversee, plan, facilitate and enable all work to develop the Flood FREQUENCY - Quarterly or Risk Management Strategy and produce the Local Flood Risk as required. Management Plan. VENUE - LA offices DURATION - 3 to 4 hours Inputs: (specify in general Responsibilities:terms)-The detailed responsibilities of the Forth Estuary Local Plan District Group are to: 1. Agenda; 1. Co-ordinate the production, approval, consultation, publication and 2. Previous meeting review of the local Flood Risk Management Plans; minutes: 2. Ensure statutory requirements and the agreed objectives are 3. relevant Papers & adhered to and communicated; Progress Reports; 3. Inform SEPA of the views expressed on the local Flood Risk 4. Presentations (on Management Plan; request); 4. Produce an interim report no later than three years after the final 5. Board decisions: local Flood Risk Management Plan is published; 5. Produce a final report no later than six years after the local Flood 6. Stakeholder issues; and Risk Management Plan is published: 7. Project Reports 6. Inform Scottish Ministers (through Lead Local Authority) if planned deadlines set in legislation or relevant guidance will not be kept: Members: (specify)-7. Submit any additional information seen as relevant to the local LA's Flood Risk Management Plan, SW 8. Serve notice to a relevant person(s) (except SEPA, another **SEPA** responsible authority or Scottish Ministers) to provide information LA Planning representation or documents in connection to their role. as appropriate 9. Produce, maintain and update Risk / Issue Registers. Other Attendees:-As appropriate Authority:-Direction Direct activities of Task Teams and any external consultants. Overall decision making be delegated to individuals from employers as appropriate. Financial Approvals within the group up to a limit set by agreement with the Local Plan District Group. Approval Agree funding contribution for co-funded work

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Approve changes including scope or cost to a level set by agreement.

Scope: All matters relating to the development/delivery of the Forth Estuary Local Flood Risk

Changes

Management Plan.

#### **Terms of Reference:**

#### Forth Estuary Local Plan District Project / Task Teams

#### Purpose / Role:-

To plan, execute and deliver projects assigned to them in support of delivery of Flood Risk Management Strategy and the Local Flood Risk Management Plan

#### Meetings:-

FREQUENCY – as required VENUE – most appropriate DURATION – as required

#### Responsibilities:-

The detailed responsibilities of the Project/Task Teams are to:

- Contribute to the production of Local Flood Risk Management Strategies through the preparation of the Local Flood Risk Management Plan;
- 2. Participate in Local Plan District partnerships;
- 3. Provide input to the Local Flood Risk Management Plans;
- 4. LLA to co-ordinate flood related work with local authorities;
- 5. Each LA to implement actions, as identified through the Local Flood Risk Management Plan, to reduce flood risk within their administrative boundary.
- 6. Contribute to the production of Surface Water Management Plans.
- 7. Identify issues, concerns and potential changes and advise Local Plan District Group.
- 8. Provide regular project descriptions, costs, durations and progress reports to Local Plan District Group.
- 9. Provide input to Risk/Issues Registers.
- 10. Prepare Highlight Reports for Local Plan District Group.
- 11. Prepare and update programmes for Local Plan District Group.

#### Inputs:-

- 1. Project brief from Planning Group;
- 2. Delivery Programme;
- 3. Best practice guidance;
- 4. Legislation, including regulations;
- 5. Studies;
- 6. Reports; and
- 7. Other information and data, as appropriate.

#### Members:-

As appropriate.

Technical specialists, as appropriate

#### Other Attendees:-

As appropriate.

Authority:- Direction	Direct activities of specific project activities in line with overall Programme
Financial	Project specific – within contractual boundary
Approval	Project specific – within contractual boundary
Changes	Project specific – within contractual boundary

#### Scope:-

Planning, execution and delivery of specific projects.

# Appendix C5

# Proposed Governance Structure and Terms of Reference – Tay Estuary and Montrose Basin LPD

#### Tay Estuary & Montrose Basin Local Plan District Groups - Responsibilities

#### Purpose / Role:-

To establish the overall responsibilities for the Chairpersons and Members of all TEAMB LPD Groups, and to clarify individuals' roles and duties.

#### **Meeting Ground Rules:-**

- 1. Start & Finish on time;
- 2. Arrive on time and stay the duration;
- 3. Mobile phones off / silent;
- 4. Open & honest participation silence is agreement;
- 5. Individuals responsible for actions;
- 6. Be flexible and support each other's progress;
- 7. Demonstrate commitment to delivery.
- 8. Individuals are responsible for actions (or inactions).

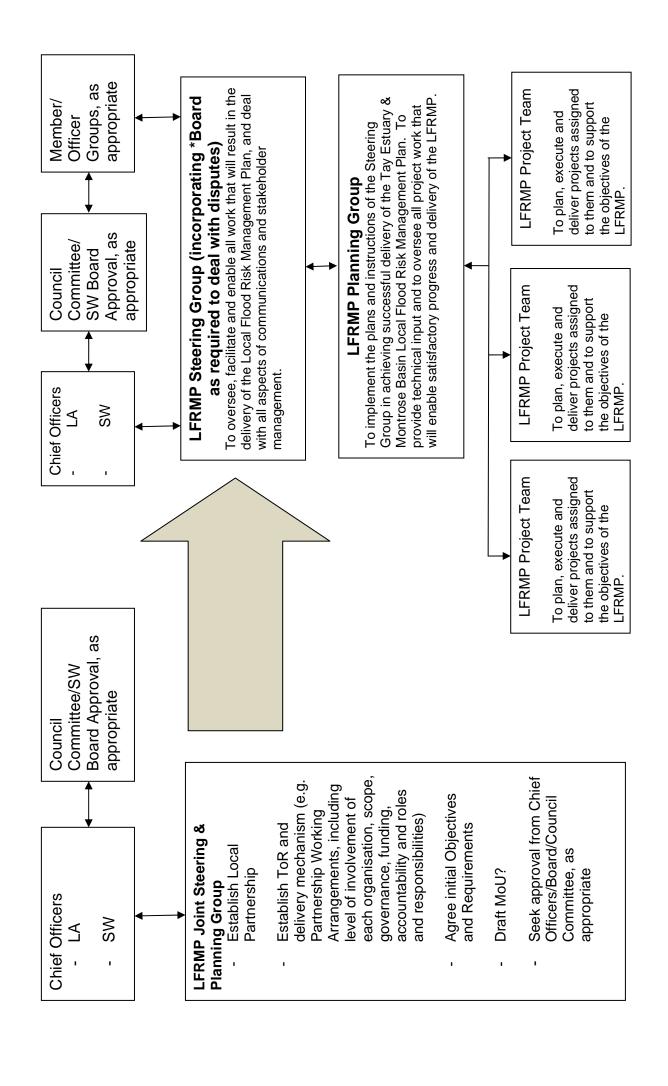
#### Role/Responsibilities:-

#### TEAMB LPD Group Chairperson role and responsibilities are to:

- 1. Chair each meeting and ensure meeting Agenda, Timetable and Ground Rules are followed;
- 2. Effectively and efficiently control and direct the proceedings, encouraging participation and active listening as and when required;
- 3. Ensure that a programme of meetings for the calendar year are agreed and are established in Group Members diaries. Manage any necessary changes to agreed meeting schedule;
- 4. Ensure a relevant, draft meeting Agenda is compiled and forwarded to Group Members by the Project Manger 1 week in advance of any meeting; Ensure any additional pertinent issues raised by Group Members are added to the meeting Agenda prior to distribution, or at least dealt with as AOCB;
- 5. Ensure all papers are circulated in advance of the meeting and that the agenda includes items for decision/discussion or information;
- 6. Ensure the PM is present to take any Actions/Minutes at the start of each meeting;
- 7. Ensure that meeting Actions/Minutes are robustly recorded and DRAFT distributed within 2 working days & FINAL distributed within 1 week of approval;
- 8. Ensure Group Members discharge their actions and tasks properly, and within agreed timescales.

#### TEAMB LPD Group Members role and responsibilities are to:

- 1. Attend all Group meetings or at least ensure representation i.e. send a delegate. Delegates must be briefed and prepared to participate in the whole meeting;
- 2. Prepare for and participate fully and proactively (i.e. listen and engage) in all discussions and activities (including reviewing all papers in advance of the meeting);
- 3. Fully undertake any tasks delegated by the Chair, within agreed timescales;
- 4. Undertake and complete any meeting actions within agreed timescales;
- 5. Adhere to meeting Ground Rules.



# Tay Estuary & Montrose Basin Local Plan District - Steering Group (incorporating \*Board as required to deal with disputes)

#### Purpose / Role:-

To oversee, facilitate and enable all work that will result in the delivery of the Tay Estuary & Montrose Basin Local Flood Risk Management Plan. To deal with all aspects of communications and stakeholder management. The group will meet as the \*Board to resolve disputes only as required.

#### Meetings:-

FREQUENCY – Quarterly or at major milestones, and as required as a \*Board to resolve disputes
VENUE – LA
DURATION – 2 to 3

#### Responsibilities:-

The detailed responsibilities of the Steering Group are to:

- 1. Agree and endorse Objectives and Requirements and ensure these are communicated and adhered to;
- 2. Address organisational issues as necessary;
- 3. Agree co-funding mechanisms for shared commissions;
- 4. Agree funding contributions for co-funded work;
- 5. As \*Board, consider and resolve disputes;
- 6. Approve and secure funding for implementation of the LFRMP;
- 7. Approve/seek committee approval for delivery mechanism for the LFRMP, including the Terms of Reference and delegated authorities as appropriate.
- 8. Seek Council Member involvement in Member Officer Groups at appropriate steps;
- Ensure the agreed objectives and requirements will fulfil the relative organisation's duties under the Flood Risk Management (Scotland) Act 2009:
- 10. Agree priorities and proposals for the LFRMP;
- Agree the delivery mechanisms (e.g. Partnership Working Arrangements, including level of involvement of each organisation, scope, governance, funding, accountability and roles and responsibilities) for the LFRMP;
- 12. Agree the recommended work plan for the LFRMP and ensure its implementation;
- 13. Ensure the appropriate resources are made available (information, staff time, money) for the timely delivery of the LFRMP milestones;
- 14. Manage and report progress to the Board members and relevant stakeholders;
- 15. Deal with all aspects of communications and stakeholder management;
- 16. Undertake the procurement process for the appointment of Consultants/ Contractors/ Suppliers for shared commissions;
- 17. Receive, consider and appropriately 'act upon' the contents of project reports; and
- 18. Establish and provide direction to the Planning Group and other project groups as required.

#### Inputs:-

Hours

- 1. Agenda;
- 2. Previous meeting minutes;
- 3. Planning Group Papers & Progress Reports;
- 4. Presentations (on request);
- 5. Board decisions;
- Stakeholder issues; and
- 7. Project Reports.

#### Members:-

1 representative from each LA (Lead Authority chair)

1 representative from SW-FRM team

Planning Group PM (Lead Authority)

Other PM (as appropriate)

SEPA Representation (Regional/Central?)

#### Other Attendees:-

As appropriate.

#### \*Board Members:-

1 senior representative from each LA

1 senior representative from SW

1 senior representative from SEPA (?)

#### Other Attendees:-

As required

Authority:-	
Direction	Overall decision making must be delegated to individuals from employers as appropriate. Direct activities of PMs, Planning Group and other groups as appropriate.
Financial	Approvals up to a limit set by organisations. The limit should be set at a level designed to facilitate the timely delivery of the project.
Approval	Agree funding contribution for co-funded work: Approve project award and initiation for co-funded work.
Changes	Approve changes including scope or cost to a level set by agreement.
<b>Scope:</b> All matters relating to the development/delivery of the Tay Estuary & Montrose Basin Local Flood Risk Management Plan.	

#### Tay Estuary & Montrose Basin Local Plan District - Planning Group

#### Purpose / Role:-

To implement the plans and instructions of the Steering Group in achieving successful delivery of the Tay Estuary & Montrose Basin Local Flood Risk Management Plan. To provide technical input and to oversee all project work that will enable satisfactory progress and delivery of the LFRMP.

#### Meetings:-

FREQUENCY – Quarterly and/or as necessary VENUE – LA DURATION – 2 to 3 Hours

#### Responsibilities:-

The detailed responsibilities of the Planning Group are to:

- 1. Provide the required input to ensure the satisfactory and timely delivery of the LFRMP;
- 2. Provide recommendations for work plan, including resource requirements, and delivery programme for the LFRMP;
- Ensure all activities are consistent with the agreed Objectives and Requirements;
- 4. Ensure all activities are consistent with best practice guidance;
- 5. Manage and report progress to the Steering Group;
- 6. Escalate issues to the Steering Group as appropriate;
- 7. Provide recommendations on setting up other project groups;
- 8. Receive, consider, challenge and accept project group outputs and reports;
- 9. Provide recommendations for Commission Proposals including technical briefs and appraise technical scope;
- 10. Prepare project review reports and make recommendations to the Steering Group; and
- 11. Ensure Steering Group requests and instructions are implemented.

#### Inputs:-

- 1. Agenda;
- 2. Previous meeting minutes;
- Steering Group Papers & Progress Reports;
- Presentations (on request);
- 5. Steering Group/Board requests/decisions;
- 6. Commission Proposals; and
- 7. Project Reports.

#### Members:-

Planning PM (chair)

LA

SW

**SEPA** 

Other PM (as appropriate)

#### Other Attendees:-

As appropriate.

Authority:- Direction	Execute actions in line with Steering Group direction. Direct activities of other groups.
Financial	None
Approval	Technical matters and scope only, within remit approved by Steering Group
Changes	Technical matters and scope only, within remit approved by Steering Group

#### Scope:-

All matters relating to the development/delivery of the Tay Estuary & Montrose Basin Local Flood Risk Management Plan, based upon agreed objectives and requirements.

#### Tay Estuary & Montrose Basin Local Plan District Project Teams

#### Purpose / Role:-

To plan, execute and deliver projects assigned to them and to support the objectives of the Tay Estuary & Montrose Basin Local Flood Risk Management Plan.

# Meetings:-

FREQUENCY – as required VENUE – Most appropriate DURATION – as required

#### Responsibilities:-

The detailed responsibilities of the Project Teams are to:

- 1. Plan, execute and deliver projects assigned to them;
- 2. Provide project descriptions, costs and durations to the PM for circulation to the Planning Group;
- 3. Provide regular and monthly project progress reports to PM;
- 4. Support the PM in its efforts to coordinate activities across partners;
- Identify issues, concerns and potential changes to projects and advise PM;
- 6. Ensure adequate resources are made available to deliver projects as planned;
- 7. Identify financial requirements for delivery of projects and monitor spends.

#### Inputs:-

- 1. Project brief from Planning Group;
- 2. LFRMP Delivery Programme;
- 3. Best practice guidance;
- 4. Legislation, including regulations;
- 5. Studies;
- 6. Reports; and
- 7. Other information and data, as appropriate.

#### Members:-

Specific to partner organisation.

Project PM (Chair)

Technical specialists, as appropriate

#### Other Attendees:-

As appropriate.

Authority:-	
Direction	Direct activities of specific project activities in line with overall Programme
Financial	Project specific – within contractual boundary
Approval	Project specific – within contractual boundary
Changes	Project specific – within contractual boundary
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#### Scope:-

Planning, execution and delivery of specific projects.

#### Flood Risk Management Planning - Key Outputs

#### 1. Catchment Characterisation:

- (i) An overview of the Local Plan Districts, catchments within them, coastal areas and Potentially Vulnerable Areas. This will include a description of the natural characteristics of the catchment (hydrology, topography, land use, the built environment, urban centres, economic activity, environmental and cultural sensitivity, climate change, etc.);
- (ii) A summary of the natural state of the fluvial environment and coastal processes (including erosion and sediment transportation / Section 20 outputs) as well as any opportunities and constraints to natural flood management;
- (iii) A review of existing Flood Risk Management measures;
- (iv) A summary of the current risk and damages to receptors in each catchment. This will include a description of the flooding impacts for a range of return periods for each Local Plan Districts, main catchment, coastal area, and Potentially Vulnerable Area, based on:
  - the sources of flooding;
  - the receptors which are at risk and the concentration of these receptors within the regions;
  - the economic, social and environment impact of flooding;
  - the impact of climate change.
- (v) The key output at this stage is a characterisation report for each Local Plan Districts, broken down by main river catchments and coastal cells. Based on this information, initial objectives for the management of flood risk within each Potentially Vulnerable Area will be drafted.

#### 2. Objective Setting:

- (i) Initial objectives will be based on the characterisation exercise. These initial objectives should be aspirational, and set so as not to limit the subsequent selection and appraisal of measures. The majority of the objectives will be set at the scale of individual Potentially Vulnerable Areas. Where Potentially Vulnerable Areas contain multiple flooding issues, objectives should be set for each significant flooding issue identified (i.e. where more than 50 properties are affected).
- (ii) It is important to note that the initial objectives will be refined further based on the outcome of the detailed appraisal and prioritisation work, which will evaluate what is practical and feasible in terms of technical solutions and resources.

#### 3. Short Listing

(i) To select a short-list of measures to meet the objectives for each Local Plan District, the long list will be screened. The purpose of this step is to remove any potential measures that are clearly not feasible or unrealistic

based on three main criteria; Technical, Legal and Financial. This process relies heavily on expert judgement. Where there is doubt, a measure should be retained for further evaluation as part of the short-list. All decisions and reasoning should be clearly set out and recorded.