

PERTH AND KINROSS COUNCIL

Environment Committee – 4 November 2009

BIENNIAL REPORT ON FLOOD PREVENTION RESPONSIBILITIES 2009

Report by the Depute Director (Environment)

The Council is required by the Flood Prevention (Scotland) Act 1961 (as amended) to publish a biennial report specifying the appropriate actions which the Council has taken and intends to take, with regard to flood mitigation within the Council area. The biennial report is presented for Members' approval. Please note with the change of Legislation and the New Flood Risk Management (Scotland) Act 2009, this may be the last report required.

RECOMMENDATIONS

The Committee is asked to:-

- i) Approve the Biennial Report.
- ii) Agree to the publishing of the attached biennial flooding report.
- iii) Note that an article will be included in the next edition of Perth and Kinross News summarising the report.

BACKGROUND

1. Although the primary responsibility for flood prevention lies with landowners and property owners, The Flood Prevention (Scotland) Act 1961 (as amended) places a statutory duty on the Council to inspect and keep clear of debris watercourses which could, if blocked, flood non-agricultural land. Additionally, where appropriate and economically justified, the Council has powers to promote flood mitigation schemes. The Council has no duties relating to the flooding of agricultural land or agricultural flood defences. The Act requires the Council to publish a report every two years which contains the following information:-
 - The measures which the Council considers are required to be taken to prevent or mitigate flooding of non-agricultural land in Perth and Kinross, such as keeping appropriate watercourses clear or promoting flood prevention schemes where justified.
 - Details of such measures as described above that the Council has taken since the date of publication of the previous report (in November 2007) to prevent or mitigate such flooding.
 - All occurrences of flooding since that date.

2. In addition, a newspaper article summarising the report and clarifying the extent of the Council's roles and responsibilities in relation to flood mitigation will be prepared for the Perth and Kinross News and will be delivered to all residential properties in the Council area. Copies will also be available in all Council offices and libraries.
3. It should be noted that, as with road and bridge maintenance, it is not possible within the resources available to carry out all of the identified flood mitigation measures. Works will be undertaken in order of priority taking into account the likely risk of flooding and probable cost of the works. The current financial climate may impact on previously anticipated programmes of work.

CONSULTATION

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

RESOURCE IMPLICATIONS

5. There are no resource implications arising directly from the recommendations in this report. The attached report, however, makes reference to future flood mitigation schemes. Following implementation of the Concordat between the Scottish Government and Local Authorities, there have been significant changes to funding arrangements. Up until the end of March 2008, retrospective grant for up to 80% of the cost of flood mitigation schemes was available from the Scottish Government. In April 2008 this ring-fenced grant system ceased and the funding was rolled up into Local Government finance Settlements. Local Authorities are now expected to fund flood schemes from their concordat settlements. Clearly the issue of funding support from central government will 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 mitigation schemes in a number of areas, there will continue to be uncertainty over when these schemes might be delivered.

EQUALITIES ASSESSMENT

6. The Council's corporate Equalities Assessment Framework requires an assessment of functions, policies, procedures or strategies in relation to race, gender and disability and other relevant equality categories.
7. The function, policy, procedure or strategy presented in this report was considered under the Corporate Equalities Assessment Framework and the determination was made that the items summarised in this report do not require further assessment as this policy has the same impact for all equalities by attempting to reduce the flood risk to the Perth and Kinross Council area through flood schemes and/or watercourse maintenance.

STRATEGIC ENVIRONMENTAL ASSESSMENT

8. Strategic Environmental Assessment (SEA) is a legal requirement under the Environmental Assessment (Scotland) Act 2005 that applies to all plans, programmes and strategies, including policies (PPS).
9. The PPS presented in this report was considered under the Environmental Assessment (Scotland) Act 2005 and the determination was made that the items summarised in this report do not require further action as they do not qualify as a plan, programme or strategy as defined by the Act

COUNCIL CORPORATE PLAN OBJECTIVES 2009-2012

10. The Council's Corporate Plan 2009 – 2012 lays out five Objectives which provide clear strategic direction, inform decisions at a corporate and service level and shape resource allocation. This reports impacts on the following:-
 - i) A safe, secure and Welcoming Environment
 - ii) Healthy, Caring Communities
 - iii) A prosperous, sustainable and inclusive economy
 - iv) Confident, Active and Inclusive Communities.

CONCLUSION

11. This report summarises what the Council has done since November 2007 to comply with the Flood Prevention (Scotland) Act 1961 (as amended). The report shows inspections undertaken, flood events, maintenance of watercourses undertaken and the present flood protection schemes and any progress made with these since November 2007. This may be the last report of this type as the above legislation has been repealed with the introduction of the new Flood Risk Management (Scotland) Act 2009.

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Date of Report 27 October 2009

NOTE

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 Enterprise and Infrastructure Committee – 24 October 2007, Flood Mitigation Schemes & Flood Studies
- PKC – Environment Committee – 28 January 2009, Birnam Flood Mitigation Scheme

If you or someone you know would like a copy of this document in another language or format, (On occasion only, a summary of the document will be provided in translation), this can be arranged by contacting Alma Murray, Equalities Assistant on 01738 476558 or TESEqualities@pkc.gov.uk



Council Text Phone Number 01738 442573

Perth & Kinross Council

Flood Prevention (Scotland) Act 1961 (as amended)

BIENNIAL REPORT ON FLOOD MITIGATION RESPONSIBILITIES 2009

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1 Introduction

- 1.1 This is the seventh such document to be published by Perth and Kinross Council and reports on the activities of the Council over the previous two years in respect of its duties under the Flood Prevention (Scotland) Act 1961 as amended and specifies:
- The measures which the Council considers are required to be taken to prevent or mitigate flooding of non-agricultural land in Perth and Kinross.
 - The measures which the Council has taken since the date of publication of the previous report in November 2007 to prevent or mitigate such flooding.
 - All occurrences of flooding since that date.
- 1.2 A summary of the relevant legislation is contained in Appendix 5.

2 Flood Prevention Strategy

Responsibilities within the Council

- 2.1 The Council has determined that its functions under flood prevention legislation shall be delegated to the Environment Committee with responsibility for water course inspections and the inspection, repair and maintenance of flood defence works further delegated to the Executive Director (Environment). There are two area offices within the Perth & Kinross Council area from where the day to day inspection and maintenance of watercourses is administered. These are Perth South, based in Perth, and Perth North, based in Blairgowrie and Aberfeldy.

Incidences of Flooding

- 2.2 All incidences of flooding of non-agricultural land are recorded on a central register. This includes information on the extent of flooding, any damage to property incurred and which watercourse, if any, was the cause.

Assessment of Watercourses

- 2.3 In addition, as required by the Act, the Council instigated a watercourse assessment programme as set out in the initial Report published in November 1997. In order to comply with the Act it was essential to prepare a list of watercourses within the area that could lead to the flooding of non-agricultural land - see Appendix 1.

- 2.4 The first of the watercourse assessments was undertaken in the summer months of 1998 and proved to be a considerable task, due to the topography of the Council area and the complex network of rivers. The main rivers and burns in the Council area and the principal catchments are shown schematically in Appendix 1. In the first instance, a desk study was undertaken to establish the locations of all the watercourses and the nature of the adjoining land use, and this was followed up in the summer of 1998 with a visual inspection of many of the watercourses.
- 2.5 The assessments from 1998 were then used to identify those watercourses that would need frequent inspection, to prevent or mitigate the flooding of non-agricultural land. Many watercourses within Perth and Kinross affect only agricultural or hill land and as such there is no need for them to be included within a formal inspection regime.
- 2.6 Annual inspections are carried out on watercourses within the Perth & Kinross area. These inspections are based on findings in previous inspections as well as information from the public and flooding incidents that have occurred within the council area. The inspections are usually undertaken between June and November and include many smaller watercourses and ditches as well as culverted systems. The summary for 2008/2009 inspections is included in Appendix 2.

Maintenance of Watercourses and Existing Flood Mitigation Schemes

- 2.7 All existing flood defences are inspected on a monthly basis, and more frequently for critical elements of the Perth Flood Prevention Scheme.

Promotion of Flood Mitigation Schemes

- 2.8 The Council has undertaken flood studies in a number of areas where flooding has occurred. Schemes are being promoted in areas where a positive net present value 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 '5. Flood Mitigation Works - Capital Schemes', below.

3 Measures Required

- 3.1 A list of maintenance work required has been drawn up based on the watercourse inspections carried out between November 2007 and 2009 and the register of flooding occurrences. This work will be undertaken in order of priority based upon risk of flooding and the likely cost of the work.

Maintenance work identified during the 2007-2009 inspections is also summarised in Appendix 2.

- 3.2 From the initial watercourse inspections an assessment of future inspection requirements was made. Proposed inspection frequencies are also given in the table in Appendix 2. Watercourses where no flooding risk to non-agricultural land was identified are excluded from the table.
- 3.3 The 2007 report indicated the need for measures to be taken to implement a regular inspection and maintenance plan for hakes/screens in the Perth and Kinross Council area and this has now been established. This pro-active management towards inspection and maintenance has helped reduce flooding incidents caused by blocked hakes/screens. In addition details of the Perth Flood prevention Scheme have now been input on the Geographic Information System (GIS) and it is intended to expand the system to record inspection reports. In order to aid the watercourse inspection function, the watercourse network is being digitised in order to include it on the asset management server.

4 Measures Taken

- 4.1 The Council has undertaken a limited amount of maintenance work since November 2007 and a full list of all works undertaken is given in Appendix 3. 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 piped/culverted systems.

5 Flood Mitigation Works – Capital Schemes

5.1 Completed Schemes

5.1.1 Weem Village Flood Mitigation Scheme 1998

Weem was severely affected by the January 1993 flood. Six properties including Weem Hotel were affected. The scheme consists of realignment of the Lade, 640m of embankment and installation of a pumping station. The Weem Village Flood Mitigation Scheme was completed in September 2006.

A standby generator was installed in April 2009 to provide a failsafe electricity supply to the existing pumping station.

5.1.2 Milnathort Flood Mitigation Scheme 2002

Milnathort was badly affected by flooding from the Back Burn in January 1993 with over 40 properties affected. The scheme consists of repairs to existing walls, the construction of new flood walls, service diversions below the Wester Loan Bridge and the installation of non-return valves.

The Scottish Ministers confirmed the scheme in November 2003 and in December 2004 the Enterprise and Infrastructure Committee (Article No. 335) approved its construction. The Milnathort Flood Mitigation Scheme was substantially complete in August 2006, however, further flooding in December 2006 within Milnathort resulted in a review of the scheme which was the subject of separate reports to Committee.

Consideration is currently being given to a new flood wall to replace the former bund at 5 Wester Loan, Milnathort and a pumping station to mitigate surface water flooding.

5.2 Schemes Being Promoted

The following schemes are being promoted and will be prioritised and constructed once funding becomes available. These are not listed in any order of priority.

Following implementation of the Concordat between the Scottish Government and Local Authorities, there have been significant changes to funding arrangements. Up until the end of March 2008, retrospective grant for up to 80% of the cost of flood mitigation schemes was available from the Scottish Government. In April 2008 this ring-fenced grant system ceased and the funding was rolled up into Local Government finance Settlements. Local Authorities are now expected to fund flood schemes from their concordat settlements. Clearly the issue of funding support from central government will 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 mitigation schemes in a number of areas, there will continue to be considerable uncertainty over whether these schemes be delivered in the current financial climate.

5.2.1 Bankfoot Flood Mitigation Scheme

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 and run off from surrounding fields all contributed to the problem. The worst affected properties were along the Main Street, Tulliebelton Place, Nicoll Drive, Prieston Road and Innewan Place. In 2004 at least 16 properties were affected with 6 having water within the building.

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 will be reviewed as part of the current work.

The proposed scheme consists of walls and embankments placed along the burns and an upstream flood storage area on the Glenshaugh Burn.

5.2.2 Greenloaning Flood Mitigation Scheme

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.

The proposed flood mitigation scheme involves raising the access bridge and downstream timber footbridge as well as improving existing embankments.

5.2.3 Comrie, Dalginross

Significant flood damage occurred in 1993 and again in 1997 as a result of flooding from the Water of Ruchill and River Earn.

A combination of flood walls and embankments are proposed.

5.2.4 Scone (Annaty Burn)

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.

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.

5.2.5 Coupar Angus

In August 2004, at least 6 properties in George Street were inundated as a result of flooding from the Coupar Burn.

The proposed scheme consists of a new flood wall to protect these properties.

5.3 Flood Mitigation Schemes Not Being Pursued Further

Flood studies showed that the following schemes which were previously identified could not be justified on economic grounds and will not be pursued

5.3.1 Birnam

Flooding from the River Tay and Inchewan Burn in January 1993 affected all of the lower 5 houses on Burnmouth Road, Birnam. The originally proposed scheme consisted of 84 metres of flood wall and 64 metres of embankment protecting these houses.

However since then, the properties have been flooded again in 2002 and 2004 as a result of flash floods on the Inchewan Burn causing localised flooding at an access bridge upstream of the properties.

Numbers 1, 2 and 3 Burnmouth Road were flooded again in 2006 by the River Tay and Inchewan Burn. Revised scheme proposals had been developed the scheme did not progress to construction as it was not economically viable. However the Council has commissioned a flood study of the Inchewen Burn at the bridge as the first step toward the promotion of a minor flood scheme here.

5.3.2 Inchyra

The flood study noted that only a single property flooded and the cost of flood defences would not meet the economic criteria.

5.3.3 Longforgan

The study indicated that a new culvert below Knapp Road would be required but the cost of the scheme would be excessive in comparison to the cost of damage.

5.3.4 Invergowrie

The flood study showed that only one property flooded and the cost of defences would not meet the economic criteria.

5.3.5 Dalguise

The cost of flood mitigation measures proved excessive in comparison to damages. A mitigation scheme would have required multi-million pound alterations and improvements to the Perth to Inverness railway line, and would not have reduced the risk of flooding substantially, hence could not be justified.

5.3.6 Alyth

The study showed that three footbridges would have to be raised, walls would have to be constructed and several weirs would have to be removed. The overall cost of such a scheme could not be justified.

5.3.7 Burrelton

The flood study identified that walls would require to be constructed alongside two burns, the cost of which would not meet the economic criteria.

5.3.8 Bankfoot (Upper and Lower Gauls)

A flood mitigation scheme to protect the properties at Lower and Upper Gauls, Bankfoot would not meet the economic criteria. However the previous study of this area is currently being reviewed and may eventually form part of the Bankfoot Flood Mitigation Scheme. This may provide an economically justified and holistic approach to flood mitigation in Bankfoot.

5.3.9 Scone (Barrel Drain)

The flood study noted that a considerable length of drain needs to be upgraded and this would be substantially in excess of the damages caused.

5.4 Flood Mitigation Schemes Requiring Further Investigations

5.4.1 Almondbank

Almondbank was severely flooded from the River Almond and Pow Burn in January 1993 and again in September 1999. Flood defences are required to protect several groups of houses, the Vector Aerospace workshops, a trout farm and the bowling club.

Following public consultation, an extensive review of the scheme has been carried out and this has concluded that more properties are at risk of flooding than previously thought. Consultants are currently amending the outline scheme design to address this. Assessments of drainage impacts, ground conditions and structural issues (relating to the proposed raising of bridges over the water courses) are still to be completed. The environmental statement is also to be updated.

5.4.2 Dunkeld

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.

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.

5.4.3 Pitlochry

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

Consultants undertaking the flood study have indicated that further investigative work is required to examine:

- a. the surcharge from the culvert at Croftinloan
- b. the lack of capacity of the culverts below the A9 Perth to Inverness road
- c. the drainage in the field to the west side of the A9

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

Funding difficulties may affect progress on these three schemes.

5.5 Flood Studies Being Undertaken

Consultants are presently undertaking flood studies for the following areas:-

- Meikleour, Caputh & Spittalfield
- Kinross (South Quaich Burn)
- Comrie & Dalginross
- Birnam (bridge over the Inchewen Burn to the property 'Rhovalion')

5.6 Flood Studies to be Undertaken

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

- Aberfeldy
- Logierait

6 *Additional Activities*

Flood Liaison & Advice Group

- 6.1 The Perth and Kinross Flood Liaison and Advice Group is chaired by the Environment Service and also includes representatives from SEPA, the Police, the Fire and Rescue Service, Statutory Undertakers, House Builders and the Insurance Industry. The group discusses various strategic flooding issues with particular reference to land use planning.

The group has not met very often since the last report, as knowledge of flood risk has improved, but will be increasing the number of meetings in the following year to address the implication of changes to the Planning Legislation and the introduction of the Flood Risk Management (Scotland) Act 2009 on existing functions.

Planning and Development Management

- 6.2 Planning applications are considered within the context of the development plan and Scottish Planning Policy 7 which provides detailed criteria against which such applications will be determined. In the first instance the presumption is against development in areas of flood risk, with the onus on the developer to prepare a detailed flood risk assessment in support of their planning application to show that the development is not susceptible to flooding and will not create a flood risk upstream or downstream. Any flood risk assessment will use the model provided in the Flood Estimation Handbook (FEH) recommended by SEPA, COSLA and the Scottish Government. Due consideration is also given to suitable development of suitable sustainable urban drainage systems (SUDS).

7 *Flooding since November 2007*

- 7.1 Most incidents of flooding of non-agricultural land involve the flooding of public roads, parks and gardens and are shown in Appendix 4. The majority of road flooding incidents are caused by the capacity of the drainage systems being exceeded, run off from farmers' fields, etc and not by blocked or overtopped watercourses.
- 7.2 Several flood events occurred between November 2007 and present, these events affected a number of areas within Perth & Kinross including Milnathort, Scone, Luncarty, Grange Village and Invergowrie. As a result the Council have commissioned consultants to undertake preliminary flood studies at the worst affected communities to consider options and advise on the feasibility of promoting a flood prevention scheme – see 5.5 above.

Main Watercourses in Perth & Kinross

	Altchlappie		
	Altreach		
	Ballintuim		
	Croft na Coille		
	Dalnabreck		
	Dounie		
	Allt' Camnagar		
	Pitcarmick		
Dully Ditch			
Shee Water	Shee-Blackwater	Ardle	
		Ericht	
	Alyth		
Camno			
Meikle	Dean		
	Burrelton		
	Coupar Angus		
	Collace		
	Doctor's, Alyth		
	Kettins		
	Lunan	Isla	
	Corral Burn		
	Glenshauch		
Wynnie	Garry Burn	Ordie	
		Birnam	
		Drumatherty	
		Luncaty	
		Spittalfield	
		St.Martins Burn	
Quaich	Loch Freuchie	Braan	
	Fearnan	Loch Tay	
	Keltney	Lyon	
	Urlar	Moness	
	Loch Rannoch		
	River Garry		
	Loch Tummel		
	Moulin	Tummel	
Methven	Pow Burn	Almond	
Dron	Farg	Town Lade	
	Machany		
	Pow Water		
	Ruthven		
	Lednock		
	Milton		
	Ruchill Water		
	Deich		
Shaggie	Turret	Earn	
	Scouring Burn	Craigie	
	Bonard		
	Langley	Annaty	Tay
		Craig Burn	Grange of Pow
		Baldegarno	Huntly Burn
		Fowlis	Invergowrie
			Firth of Tay
	Back Burn	N. Quiech	
	Cambo Burn	S. Quiech	
		Ury	
Butterwell	Pow Mill Burn	Pow Burn	Loch Leven
		Gairney Water	River Devon

Survey Results 2008 & 2009 and Proposed Maintenance Measures

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
ERROCHTY WATER	NN748645 - NN747643	Small Burn/Culvert: runs beside Burnside Cottage and Chalets.	Overgrown vegetation on both banks and over hanging trees on the left hand bank. No flow restriction.	Annual	No maintenance required.
KINLOCH RANNOCH (E)/ RIVER TUMMEL	NN683588	Burn/culvert: Near Drumchastle Farm and Drumchastle Cottages.	Overgrown and over hanging trees both banks. Stock screen above bridge.	Annual & After heavy rainfall	Check stock screen and clear when required.
KINLOCH RANNOCH (N)/ RIVER TUMMEL	NN665588 – NN663587	Ailt Mhor Burn – Kinloch Rannoch	Overgrown vegetation and trees in places but not causing a problem at present. Tree across burn with 10" trunk.	Annual	Tree could be removed from burn if causing obstruction to flow.
KINLOCH RANNOCH (N)/ RIVER TUMMEL	NN665590 – NN655588	Un-named burn and culvert running beside Craig Varr Place, Kinloch Rannoch	Generally good condition some overgrown vegetation in places.	Annual	CCTV survey should be carried out on culverted sections.
RIVER TUMMEL	NN957575 – NN953571	Un-named burn running between Edradroch and Donavour House	Overgrown vegetation and overhanging trees, erosion both banks.	Annual	Cutback vegetation and low hanging branches as required.
RIVER TUMMEL	NN975553 – NN968548	Un-named burn by Balgowan	Overgrown vegetation and erosion both banks but not restricting flow.	Annual	No maintenance required.
RIVER TUMMEL	NN965558 – NN964557	Un-named burn between knockdarroch and East Haugh of Ballyoukan	Overgrown vegetation, over hanging trees and erosion both banks.	Annual	No maintenance required.
RIVER TUMMEL	NN975564 – NN965555	Un-named burn near Knockdarroch and Mid Balchandy	Overgrown vegetation both banks but not obstructing flow.	Annual	Monitor and cut back vegetation when required.
RIVER TUMMEL	NN966559 – NN963557	Un-named burn by Knockdarroch Farm	Overgrown vegetation, overhanging trees and erosion along both banks.	Annual	No maintenance required.
RIVER TUMMEL	NN970557 – NN966553	Un-named burn by mid Balchandy	Overgrown vegetation, overhanging trees and erosion of both banks.	Annual	No maintenance required at present.
RIVER TUMMEL/ LOCH TUMMEL	NN763593 - NN770593	River Tummel/Loch Tummel: where they meet	Overgrown and over hanging trees on both banks.	Annual	No maintenance required.
LOCH TUMMEL	NN769595 - NN770593	Culvert: small burn and culvert that passes near Dalcroyc cottages before entering Loch Tummel.	Overgrown vegetation and over hanging trees both banks. Problem with sedimentation at culver NN770593	Annual & After heavy rainfall	Sediment management may be required at culvert and consideration should be given to a screen.
RIVER GARRY	NN908615 - NN912615	Small burn/culvert: by Cottages at Tenandry	Overgrown vegetation both banks but no maintenance required at present	Annual and after heavy rainfall.	Continue to monitor

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
RIVER GARRY	NN905634	Culvert: Alt Na Fearn Cottage - road to Blair Atholl	Overgrown trees and low hanging branches.	Annual - Chevron Cottage after heavy rainfall.	Cut back low hanging branches where required.
PITLOCHRY/RIVER TUMMEL	NN937587 - NN937585	Cuic Pond and Burn: From road to Golf course to Chevron Cottage	Some overgrown vegetation and over hanging trees in channel above Moulin although not restricting flow. Monitor gravel inlet at Church Road bridge. Some General rubbish and debris along length of the burn. Flowing clear	Annual	May need to remove gravel build up from bridge. Monitor gabions and screens behind Co-op, carry out general clearance of burn.
PITLOCHRY/RIVER TUMMEL	NN944595 - NN940577	Moulin Burn: From Creag Bhreac above Moulin through Pitlochry to confluence with Tummel.	Overgrown vegetation and trees both banks. Some debris in channel but not causing a problem. Monitor screens along system and clear as necessary.	Annual and after heavy rainfall	Thin vegetation as required, screens should continue to be monitored. General clearance of the burn could be undertaken.
PITLOCHRY/RIVER TUMMEL	NN943584	Culvert: Well Brae, Pitlochry.	Overgrown vegetation and over hanging trees along length of burn.	Annual	No maintenance
PITLOCHRY/RIVER TUMMEL	NN953601 - NN948587	Tomcroy Terrace: runs from hills in two legs toward Tomcroy before entering a pond system in the Atholl Palace Hotel	Overgrown vegetation and over hanging trees along length of burn.	Annual	Monitor screens regularly. Cut back and remove vegetation or trees as required.
PITLOCHRY/RIVER TUMMEL	NN977591 - NN950573	Kinnaird Burn: runs through grounds of Atholl Palace hotel and Blair Atholl Distillery Edradour Burn: from Knockbarrie to the confluence with the river Tummel.	Overgrown and over hanging trees both banks.	Annual	No maintenance required.
PITLOCHRY/RIVER TUMMEL	NN943575 - NN941575	Culvert: In wooded area adjacent to Fonab Crescent.	Over hanging tree branches some have fallen in water.	Annual, check after heavy rainfall	General clearance of channel required
PITLOCHRY (S)/RIVER TUMMEL	NN958573- NN955564	Burn by Donavourd House and West Haugh of Dalshian	Over hanging tree branches and overgrown vegetation both sides. Tree across channel is allowing water to pass but could block.	Monitor culverts throughout the winter months.	Continue to clear branches as and when required, thin vegetation if necessary. Remove fallen tree to prevent blockage. Must be monitored regularly during and after heavy rainfall.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
PITLOCHRY (S)/ RIVER TUMMEL	NN964573 – NN965665	Burn that runs through Balnacree Farm and Croftinloan through to Railway	Channel through gardens is being well maintained and small dam above road culvert has been repaired. Overgrown vegetation along both banks above and below properties. Screens and channel above housing on private road need to be checked and cleared.	Monthly inspections should be carried out on this section. Further inspections should be undertaken when heavy rainfall has occurred.	No maintenance required to channel but screens and man-made channel above housing require clearance to ensure functioning to capacity.
PITLOCHRY (S)/ RIVER TUMMEL	NN972571 – NN958559	Burn from Creag Gheal to below the A9	Trees across burn in places some general erosion. Instability along banks for a substantial length.	Continue to monitor during wet conditions. A full annual inspection should be carried out	Monitor banks remove trees/debris as and when required.
PITLOCHRY (S)/ RIVER TUMMEL	NN970566 – NN962560	From Mains of Ballyoukan to General Wades Military Road	Over hanging vegetation both banks, not affecting flow. Small downstream ditch may need works in time.	Should be inspected annually and after heavy rainfall.	No action required at present but monitor and clear as required.
PITLOCHRY (S)/ RIVER TUMMEL	NN966559 – NN963558	Unnamed burn in wooded area to the east of the pottery	Overgrown vegetation and over hanging branches both sides. Erosion of both banks, some overgrown vegetation in the channel.	Continue to monitor regularly.	No maintenance required.
PITLOCHRY (S)/ RIVER TUMMEL	NN965558 – NN964557	Small unnamed burn from fields	Overgrown vegetation both banks but not affecting flow.	Continue to monitor regularly.	Continue to inspect regular although no maintenance required at present
PITLOCHRY (S)/ RIVER TUMMEL	NN966558 – NN964557	Small burn runs past Knockdarroch farm to General Wades Road	Some overgrown vegetation, overhanging branches and erosion along both banks, channel is clear. Some overgrown vegetation in channel.	Continue to assess regularly	No maintenance required at the moment.
PITLOCHRY(S)/ RIVER TUMMEL	NN977564 - NN965555	Unnamed burn running past Upper Ballachandy to General Wades Road	Overgrown vegetation and over hanging branches both banks. Left hand bank eroding. Blockage at outlet of second culvert NN968554.	Annual	Look at the second culvert outlet and clear or improve if possible.
PITLOCHRY(SE)/ RIVER TUMMEL	NN970557 – NN966553	From Middle Balchandy to General Wades Military Road	Channel generally clear some overgrown and overhanging trees but not causing a problem. Overgrown vegetation, overhanging trees on both banks. Erosion on the left hand bank should be monitored.	Annual	No maintenance at present
PITLOCHRY(SE)/ RIVER TUMMEL	NN985563 – NN969549	Pitcastle Burn from above Balgowan to A9	Some overgrown vegetation and overhanging trees both sides of channel.	Annual	Cut back vegetation and low hanging tree branches as required.
BALLINLUIG (E)/ RIVER TUMMEL/TAY	NN985525 - NO000526	Culvert/Burn: Near Wester Auchnagee Farm road	Overgrown vegetation and low hanging trees along both banks but no obstructions.	Annual	No maintenance at present.
BALLINLUIG/ RIVER TUMMEL	NN976528 - NN978529	Burn: runs beside School in Ballinluig			
BALLINLUIG/ RIVER TUMMEL	NN978529	Burn: Unnamed burn on Wester Auchnagee Road			

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
BALLINLUIG/ RIVER TUMMEL	NN978525 - NN976524	Burn: From wooded area above on Aberfeldy Road to A9 through village. Kindallachan Burn	Overgrown vegetation both banks and in channel.	Annual	Clear vegetation and branches as required. Remove vegetation from channel
TAY (NW)	NN994498 – NN998503		Overgrown vegetation and overhanging trees both banks. Main channel is clear but side ditch heavily vegetated and silted. Cattle gate above bridge on main channel should be swinging not fixed.	Annual	No maintenance required at present but monitor ditch. If any problems with stock gate then landowner will be approached.
TAY (NW)	NO001482 – NO005479	Dowally Burn	Overgrown vegetation both banks. Channel clear. Tree adjacent to Gleann Feidh may need removed in time.	Annual	Remove tree if becomes necessary.
CAMSERNEY/RIVER TAY (N)	NN814497 – NN829490	Camserney Burn	Overgrown vegetation and over hanging trees on both banks.	Annual	No maintenance required.
CAMSERNEY/RIVER TAY (N)	NN822495 – NN820493	Fuaran na Cladh	Overgrown vegetation both banks. Culvert NN820494 needs monitored.	Annual	Monitor culvert condition.
STRATHAY/ RIVER TAY (N)	NN915537 - NN914536	Burn: Along footpath to Pitlochry running through Strathtay Golf Course.	Overgrown vegetation both banks generally flowing well.	Annual or more frequent	Monitor screens and cctv survey the piped section.
ABERFELDY/ RIVER TAY (S)	NN861493 - NN859494	Burn: runs through caravan park in Aberfeldy	Heavily vegetated in place.	Annual or after heavy rainfall	Thin vegetation as required.
ABERFELDY/ RIVER TAY (S)	NN856485 - NN854497	Moness Burn: runs through Aberfeldy	Overhanging trees/vegetation in places. Gabions being undercut (Birks View). Erosion and undercutting occurring in various sections along the length of the burn.	Annual	Monitor and cut back vegetation and low hanging branches as required.
ABERFELDY/ RIVER TAY	NN862488 - NN861494	Unnamed burn: flows from above the Cottage hospital in Aberfeldy to the culvert under the Aberfeldy road through to the caravan park.	Above roadway trees have fallen into the channel. Screen also needs checked and replaced in the future.	Annual	Remove fallen trees where causing a problem.
ABERFELDY/ RIVER TAY	NN860487 – NN861491	Unnamed burn: flows from Woodside/Moness Avenue joining the burn from the cottage hospital.	Channel reasonably clear, culvert clear should be monitored.	Annual	Monitor culvert to prevent blockages.
ABERFELDY(W)/ RIVER TAY (S)	NN791461 - NN793466	Burn/Culverts: From Taymouth Castle to Fort Brae	Overgrown vegetation and over hanging trees both banks.	Annual or after heavy rainfall	Clearance work has already been undertaken on this ditch. Further work may be required.
GRANDTULLY/RIVER TAY (S)	NN912525 – NN908527	Ballinluig Burn; Runs through Grandtully	Overgrown vegetation along both banks. Retaining wall downstream of culvert in All Beag Road needs monitored.	Annual	Monitor retaining wall

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
KENMORE (N)/LOCH/ RIVER TAY	NN771459	Culvert: Near Mains of Taymouth, Caravan Park	Heavy vegetation along both banks. Screen at inlet to piped system becoming blocked.	Monitor after heavy Rainfall	Clear screen add to list for regular cleaning
KENMORE (NW)/ LOCH TAY(N)	NN677394 - NN678395	Burn/ditch: Runs through Ben Lawers Farm and down roadside	Over grown vegetation both banks some vegetation in channel in places.	Annual after heavy rainfall	Remove and thin vegetation as required. Ditch struggles to cope in heavy rainfall may require to be piped.
KENMONRE (NW)/ LOCH TAY (N)	NN626364	Burn/ditch: runs across road and beside Greenacre Chalets	Overhanging vegetation and trees upstream of Chalet. Well maintained through garden.	Bi-annual (2011)	None
FEARNAN/ LOCH TAY (N)	NN719449 - NN721443	Burn: from Clach-na-Curic behind village hall through village.	Overgrown vegetation both banks heavy in places. Undercutting going on along length.	Annual	Cut back vegetation as required. Camera piped system.
FEARNAN/ LOCH TAY (N)	NN724447 - NN723445	Burn: Behind new homes in Fearnan, near Pottery/Stag Cottage.	Small man made channel behind New Homes. Overgrown vegetation some heavy sedimentation and vegetation in channel.	Annual and after heavy rainfall	Thin vegetation in channel around stag cottage.
FEARNAN/ LOCH TAY (N)	NN 722449 - NN723445	Burn: Runs through garden of Clach Na Tuirc and through some of the village.	Small ditch not well defined, piped system needs investigated. Some fallen branches in slabbed area of channel.	Annual	Remove fallen branches.
LOCH TAY	NN755440 –	Acharn Burn: Passes through village of Acharn	Overgrown vegetation and overhanging trees both banks. No problem at the moment.	Annual	No maintenance required at present
LOCH TAY	NN618365 – NN618360	Burn of Edramucky: Passes through Edramucky	Overhanging trees and low hanging branches both banks. The channel is flowing clear.	Annual	No maintenance required at present
GLEN LYON/ RIVER LYON (S)	NN578464 - NN577468	Ditch: Passes by Riverside Cottages Glen Lyon	Overgrown vegetation both banks but not restricting flow.	Bi-annual	Vegetation could be thinned.
GLEN LYON/ RIVER LYON (N)	NN665483 - NN662482	Culvert: Passes under road East of Invervar Lodge (C448)	Clear at present.	Annual or after heavy rainfall	Monitor during heavy prolonged rainfall. Survey culverted section.
GLEN LYON/ RIVER LYON (N)	NN724477 - NN729472	Ditch: Runs behind Pass of Lyon	Over grown vegetation both banks but not affecting channel	Annual or after heavy rainfall	Monitor for blockages
GLEN LYON/ RIVER LYON (N)	NN721477 - NN729473	Culverts/Drains: Through the pass of Lyon			
FORTINGALL (E) /RIVER LYON(N)	NN757475	Culvert: Garth Lodge	Over grown vegetation both banks but not affecting flow.	Annual	No maintenance required
COSHIEVILLE/ RIVER LYON (N)	NN777493 - NN778490	Culvert: In garden at Coshieville	Over hanging trees both sides. Grid requires to be cleared.	Annual or after heavy rainfall	Clear screen and monitor regularly.
KELTNEY BURN/RIVER LYON (N)	NN773492 - NN734491	Keltney Burn: Man made channel for Smithy	Upstream of bridge over hanging trees and overgrown vegetation. Well maintained through garden.	Annual	No maintenance required, monitor.
RIVER LYON	NN737475 – NN738464	Allt Odhar Burn	Overgrown vegetation and over hanging trees both banks.	Annual	No maintenance required at present.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
KINLOCH RANNOCH(SE)/ RIVER TUMMEL(S)	NN719569 - NN719572	Culvert: inlet culvert passing under road into Lochan An Diam	Over grown and over hanging trees both banks. Some trees growing in channel with 6" girth.	Annual and after heavy rainfall	Cut back and remove trees as necessary.
KINLOCH RANNOCH(SE)/ RIVER TUMMEL(S)	NN690575 - NN692577	Tempar burn: From East Tempar farm - confluence Dunalastair Water	Overgrown hanging trees both banks. Gravel banks forming in channel should be monitored. Wall partially collapsed in places although not causing a problem at present. Overgrown vegetation both banks, river clear.	Annual or after heavy rainfall	Gravel may need to be reduced prevent blockage.
DALGUISE/ RIVER TAY (S)	NN994470 - NN993474	Middleton Burn/Culvert: Dalguise crosses B898	Overgrown vegetation both banks, river clear.	Annual	No action required.
DALGUISE (S)/ RIVER TAY (S)	NN995462	Small Burn: at Woodinch cottage on B898 to Dalguise.	Overgrown Vegetation both banks. Culverted section NN995462 Pipe silted to half height.	Annual or after heavy rainfall	Clear culverted section to improve flow.
LITTLE DUNKELD (SW)/ RIVER BRAAN(S)	NO021418	Culvert/Ditch: runs beside Ladywell cottage on A822	Vegetation both banks but water flowing fine. Piped section should be surveyed over next 2 years.	Annual or as required	Monitor
LITTLE DUNKELD (SW)/RIVER BRAAN (S)	NO026419 – NO025422	Culvert: under rail bridge on road to Ladywell A822 to A9 and Tennis Courts in Dunkeld	Grid on A822 requires regular clearing and monitoring a new designed grid should be considered. In open channel beside tennis courts branches require clearing and the grid at the A9 also requires clearing and replacement.	Annual or after heavy rainfall	Clear any branches obstructing flow and consider replacement of screens at railway bridge and above A9.
GLEN QUAICH – RIVER QUAICH	NN826403 – NN827403	River Quaich, Quaich Cottages – Glen Quaich	Overgrown vegetation both banks but river flowing well.	Annual	No maintenance required at present.
LITTLE DUNKELD/ RIVER TAY(S)	NO028414- NO032422	Inchewan Burn: Burnmouth Drive, Little Dunkeld	Overhanging trees on some sections, some undercutting and erosion occurring along channel. Some trees and branches have fallen across and into the burn. Gabion mattress under rail bridge in poor condition, some stones under access bridge Burnmouth drive.	Monthly	Clear any fallen trees or branches. Some of the stones from the access bridge could be rolled downstream. Gabions should be monitored. Look at erosion near toilet building to consider works.
DUNKELD/ RIVER TAY(N)	NO031419 - NO025434	Un-named burn: Runs along A923 and in front of homes at Atholl Gardens	Overgrown vegetation and overhanging trees along channel. Burn culverted in several sections including at A923 junction, screen poor design and silted.	Monthly and during or after heavy rainfall.	Vegetation could be cleared as well as any debris in channel. Survey all the piped sections and ensure grids are kept clear.
DUNKELD/ RIVER TAY(N)	NO028432 - NO027429	Ditch/burn: Spoutwell Brae	Some overgrown vegetation and overhanging trees along burn. Some erosion and undercutting occurring along channel. Open channel generally clear enters piped system.	Monthly as well as during and after heavy rainfall.	Screens should be monitored and cleared as required. Sump cleared but should be monitored and cleared as necessary.
SHEE/ BLACKWATER	NO136586 - NO135587	Dully Ditch: Flowing into Shee/ Blackwater	Overgrown vegetation both banks some siltation and vegetation in channel	Annual	Clear vegetation as required. Check bridge working efficiently due to sediment build up.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
ARDLE	NO041638	Culvert: approximately 100m East of Stralloch House.	Build up of sediment at inlet. At bridge there is some build up of rubbish around pier. Causing blockage of channel in places.	Minimum inspection Annual	Clear any debris, clear inlet and channel.
ARDLE	NO079601 - NO080603	Alit' Camnacar: (Kirkmichael Burn) flowing between houses near P/O.	Overgrown vegetation on both banks, some siltation at inlet of culvert restricting flow.	Monthly and after heavy rainfall until culvert replaced.	Cut back vegetation as required. Monitor siltation and remove from inlet if required.
ARDLE	NO082598 - NO085604	Kirkmichael Burn: on footpath to Lair of Glenshee	Overgrown vegetation both banks and in channel. Some blockages due to vegetation.	Annual but also during heavy rainfall.	Clear any blockages and thin vegetation!
ARDLE	NO082599 - NO083600	Alit Clappy: burn runs beside Aldchlappie Hotel, flowing into Arde.	Overgrown vegetation and overhanging trees along banks. Overgrown vegetation and debris in channel	Annual	Clearance of debris, vegetation and branches could be carried out.
ARDLE	NO112537	Un-named burn/culvert: Blackcraig Castle (A924)	Overgrown vegetation and overhanging trees both banks. Channel clear of vegetation, culvert in good condition.	3 Monthly	No maintenance required at present.
ARDLE	NO122524	Culvert: South of Cally Lodge	Overgrown vegetation in both banks and in channel. Some banks have slipped due to cattle.	Annual	Cut back vegetation especially at inlet of culvert. Clear areas where banks have slipped into watercourse.
ARDLE	NO142516	Culvert: opposite Strone Farm/Village Hall - Bridge of Cally.	Some overgrown vegetation on both banks and in bed.	Annual - also after heavy rainfall.	Cut back and thin vegetation as required.
ERIGHT	NO171482	Culvert: Past the Bailey Bridge under the road.	Overgrown vegetation and overhanging trees. Some vegetation in channel and debris at culvert outlet.	Annual	Clear debris thin vegetation as required and monitor regularly
ERIGHT	NO171482	Craighall North of Bailey Bridge	Overgrown vegetation and overhanging trees. Some overgrown vegetation in channel	Annual	Vegetation could be thinned on banks and in channels.
ERIGHT	NO173491	Unnamed burn: flows to the South of Morganston farm	Overgrown vegetation both banks. Giant Hogweed along channel.	Annual and after heavy rainfall	Hogweed should be removed.
ERIGHT	NO166495 – NO155587	Morganston Burn: runs just north of Morganston farm.	Overgrown vegetation and overhanging trees both banks. Some overgrown vegetation and debris in channels	Annual	No maintenance at present debris is not causing a problem. Bulging on parapet has been passed to Structures.
ERIGHT	NO175465	Culvert: Bonnington Road/ Balmoral Road (A93)	Consider replacing screen. Overgrown vegetation along both banks some in channel, especially around inlet.	Annual and after heavy rainfall.	Monitor clear as necessary, replace screen.
ERIGHT	NO189459	Culvert: U96 Parkhill Road @ Annadale, Rattray.	Overgrown vegetation both banks, some vegetation in channel.	Annual	Cut back vegetation and monitor.
ERIGHT	NO181466 – NO178463	Un-named burn/culvert: Westfield to Keathbank Mill Blairgowrie	Overgrown vegetation both banks some debris and silt build up in channel.	Annual	Cut back vegetation especially around screens.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
ERIGHT	NO175456 - NO179456	Cuttle Burn: Blairgowrie below Burnhead Farm	Overgrown vegetation and overhanging branches. Burn flow well although some giant hogweed present on banks. Culverts in good condition.	Annual	Cut back or spray Giant Hogweed. \\\
ERIGHT	NO182453 - NO195446	River Ericht: Welton Road Blairgowrie	Overgrown vegetation and overhanging trees along both banks, erosion along left hand bank. Gabions below Blairgowrie Bridge. Some overgrown vegetation and debris in channel.	Annual	A more in depth survey is required of gabion area. Scrub requires to be cut back in places.
ALYTH (E) - ISLA	NO290506	Culvert/Burn: Near Bruceton towards Kirriemuir Road.	Running fine although there is heavy vegetation around both banks.	monthly	Thin vegetation if required.
ALYTH	NO227489 - NO244486	Alyth Burn: From Tullyfergus Bridge to Sawmill	Through the Den there is a lot of fallen trees and branches. The weir is in a poor condition several blockages in channel. Overgrown and overhanging trees and vegetation. General erosion along right hand bank.	Annual for following sections: NO227489 - NO228488 and NO239487 - NO244486	Remove fallen trees/branches from channel where causing blockages and reducing capacity. Clear channel of debris and branches.
ALYTH	NO244487 - NO258486	Alyth Burn: From Bamf Road to Springbank	Overgrown vegetation, trees and erosion varies along length of channel. Weir crest broken at square sedimentation occurring because of this. Channel generally running clear. Erosion occurring along masonry wall.	Annual	Remove Rubbish/Debris especially around bridge at park. Weir should be repaired to restore flow regime.
ALYTH	NO250484 - NO261488	Alyth Burn: From behind Springbank road to Bridge B954.	Heavy vegetation and overhanging trees both banks, general erosion occurring. Hogweed opposite sewerage works.	Annual	Clear Giant Hogweed, debris and rubbish. Monitor wall at sewage works.
ALYTH	NO245486	Culvert: Johnshill Road, Alyth	Vegetation both banks some sediment build up at screen. Grid at inlet not very good some siltation at outlet.	Annual or after heavy rainfall	Remove sediment from inlet/outlet if required. Change grid. Monitor grid and clear regularly.
ALYTH	NO245490 - NO250491	Back Burn: Flows to North of Alyth	Overgrown vegetation and overhanging trees some overgrown vegetation in channel. Vegetation at headwall.	Annual	Cutback vegetation and trees as required.
ALYTH (SW) ISLA	NO244474 - NO244478	Doctors Burn: From A926 to where it passes under road to Alyth	Vegetation both banks very overgrown. Some siltation and vegetation at inlet of culvert	Annual	Clear around screen and cut back vegetation along banks thin any vegetation in channel as required.
ALYTH (SW) ISLA	NO243478 - NO241477	Small Ditch Running into Doctors Burn: Through Field into burn.	Some vegetation in channel and on banks.	Annual	Thin vegetation as required.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
ALYTH (SW) ISLA	NO243478 - NO238477	Doctors Burn: From where burn passes under road (corner) to Lymellon House. Culvert: Thorne House off A926	Culvert inlet not in best condition but not restricting passage of water.	Minimum of annual inspection.	Inlet may require repair.
ALYTH (SW) ISLA	NO234468		Overgrown vegetation both banks and in channel, some debris also in channel. Debris at inlet Thorne Culvert.	Annual/ Monthly	Thin vegetation clear debris from channel and screen.
ALYTH (SW) ISLA	NO211479 - NO210481	Culvert/ Mill Burn: Near St. Fink	Overgrown vegetation both banks with some vegetation in channel.	Annual/culvert inlet after heavy rainfall	Vegetation could be thinned
ISLA	NO249518	Un-named Culvert: B954 Junction with U97	Vegetation at culvert inlet	3 Monthly	No maintenance required at present
ISLA/ALYTH BURN	NO263495	Balwhyme Un-named burn/culvert: Junction B954/C421	Generally clear, culvert in poor condition	3 Monthly	Monitor culvert may require to be replaced.
ISLA	NO288448 – NO283443	Balloch Meigle Burn: Flows through village of Meigle	Overgrown vegetation both banks and in channel. Some debris in channel.	Monitor after heavy rain and inspect annually.	Clear vegetation and debris as required.
ISLA	NO287458 –	Dean Water: Bridge of Dean to confluence with Isla	Overgrown vegetation both banks some vegetation in channel, heavy in places.	Check after heavy rainfall	Cut back vegetation and scrub
ISLA	NO241392 – NO239387	Kettins Burn: Flows through village of Kettins	Overgrown vegetation both banks some vegetation in the channel.	After heavy rainfall	Cut back vegetation in places but no real issues.
ISLA	NO219398 – NO226403	Coupar Burn: Coupar Angus	Overgrown vegetation both banks and in channel. Some sediment build up at inlet and outlet of culverts very heavy weed.	Annual. Monitor during heavy rainfall	Cut back and thin vegetation, clear inlet and outlet at culvert and associated weed.
ISLA	NO270425	Keillor Burn/Meigle Burn: Mill of Camno by Ardler	Overgrown vegetation on both banks and within channel. Culverted section in good condition.	Annual – 3 Monthly at culverted section	No action required at present.
ISLA	NO263461	Un-named burn/culvert (C424) Netherton	Overgrown vegetation left hand bank some vegetation in channel, culvert in good condition	3 Monthly	No action required at present
ISLA/KINNOCHTRY BURN	NO215344 – NO218348	Un-named burn/culvert: runs beside Buttergask cottages	Overgrown vegetation on both banks and some within watercourse. Could not assess condition of culverted section.	3 Monthly	Some vegetation requires cutting back and culverted section should be camera surveyed to assess condition.
ISLA	NO208411	Un-named burn/culvert: U106/A923 Bendochy Crossroads	Overgrown vegetation and overhanging trees both banks channel clear.	3 monthly	Cut back vegetation and scrub as required.
ISLA/LUNAN BURN	NO148448	Un-named burn going into Loch Marlee past Willowburn Cottage.	Reasonable condition both banks. Flowing well into culverted section.	Annual. after heavy rainfall	No maintenance required at moment but consideration should be given to upgrading the screen.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
COLLACE RIVER TAY	NO205323 – NO203326	Collace Burn: Runs through village of Collace	Overgrown vegetation left hand bank some overgrown vegetation in channel	Annual	Cut back some scrub
KINROSSIE RIVER TAY	NO188322	Un-named burn/culvert: runs through village of Kinrossie	Overgrown vegetation both bank, channel quite silty. Headwall damaged at inlet.	3 Monthly	Cut back vegetation where required. Re-build headwall.
KINROSSIE RIVER TAY	NO183325	Un-named burn/culvert: Runs between Croftanrigh and Dunsinan Wood	Overgrown vegetation both banks, channel clear. Culvert is in good condition	3 Monthly	No maintenance required.
CARGILL RIVER TAY	No151367 – NO153367	Un-named burn/culvert: A93 Smiddy Cargill Village	Overgrown vegetation both banks some heavy sedimentation in channel, some overgrown vegetation in channel.	Annual	Clear vegetation from channel and clear upstream ditch.
TAY (N) – LUNAN BURN	NO106449	Un-named burn/culvert: West Lodge of Forneth (A923)	Overgrown vegetation and overhanging trees. Some debris and vegetation in channel, build up of stones.	3 Monthly	Clear debris from channel especially fallen trees, reduce build up of stones.
TAY (N) – LUNAN BURN	NO110447	Un-named burn/culvert: Forneth House (A923)	Unable to assess condition of culvert	3 Monthly	Camera survey culvert to assess condition.
DUNKELD RIVER TAY (N)	NO027433 - NO025431	Culvert: Sawmill Brae near Dunkeld	Some overgrown vegetation and overhanging trees, erosion and undercutting occurring along channel. Some fallen trees in channel.	After heavy rainfall and annually.	Clear fallen trees and debris from channel.
BANKFOOT AREA (N)	NO056369 - NO061360	Corral Burn: Waterloo outside Bankfoot	Overgrown vegetation in places. There is a tree across the channel.	Annual - especially gabion baskets.	Thin vegetation as required and remove fallen tree.
BANKFOOT AREA	NO060363 - NO079352	Glenshauch Burn: Through Bankfoot	Heavily vegetated in places with some overhanging trees. Debris and vegetation in channel especially to rear of Church Hall and Playing fields.	Annual	Thin vegetation and remove debris especially at Playing Field and Church Hall.
BANKFOOT AREA	NO053354 - NO072347	Garry Burn: Through Bankfoot	Overgrown vegetation and overhanging trees. Some debris in channel and some fallen branches. Erosion also occurring along channel at various places.	Annual	Clear debris and branches thin vegetation. Clear debris from rear of primary school. Cut back low hanging branches.
BANKFOOT AREA	NO089337 – NO054343	Ordie Burn	Overhanging Trees along channel. Some branches in channel resulting in blockages.	Annual	Remove fallen branches from channel.
BANKFOOT AREA (SW)	NO052344 - NO053343 NO053342 - NO055345	Burn & Ditch: near St. Brides Cottage, Moneydie	Ditch heavily vegetated main channel downstream of road bridge also vegetated.	Annual	Vegetation could be thinned out vegetation in both ditch and main channel.
BANKFOOT AREA (S)	NO068327 - NO075327	Watermill Ditch: near Kilburn Cottage	Overgrown vegetation on both banks some overhanging trees.	Minimum of annual inspection.	Cut back vegetation where required. Piped section should be surveyed.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
LUNCARTY RIVER TAY	NO097303 - NO102299 + NO099302 - NO102297	Slochie Burn and Side Channel: Through Luncarty to confluence with Tay.	Slochie burn is flowing well side channel is heavily vegetated. Screen is clear but not the best design.	Annual	Thin vegetation as required.
LUNCARTY RIVER TAY	NO090312 - NO095304 + NO095304 - NO103300	Ordie burn and Coldrochie Burn running through Luncarty to river Tay	Overgrown Vegetation and overhanging trees in places along both channels	Annual	No maintenance required at present.
LUNCARTY RIVER TAY	NO060299 - NO095304	Coldrochie Burn	Overgrown vegetation, over hanging trees and erosion along both banks. Some debris in channel	Annual	Where fallen trees are causing an obstruction could be cleared but not any real issue.
NEWMILN RIVER TAY	NO132302	Un-named burn and culvert: Fairfield House (U89)	Overgrown vegetation both banks, channel running well. Culvert in good condition.	3 Monthly	Some scrub/vegetation could be cut back from banks.
NEWMILL RIVER TAY	NO088325	Un-named culvert: U38 Newmill Cottages	Generally running well	3 Monthly	No action required at present.
STANLEY RIVER TAY	NO106336	Culvert: Junction U117/B9099	Both banks and channel heavily overgrown with vegetation, piped section difficult to see.	Minimum annual but also after heavy rainfall.	Clear channel and banks, survey piped section, screen will also need replaced.
STANLEY RIVER TAY	NO113329 - NO116329	Mill Lade	Some vegetation in channel	Annual	Thin vegetation
STANLEY RIVER TAY	NO111329 - NO111328	Mill Lade Road	Overgrown vegetation both banks and some debris at culvert inlet.	Annual	Remove debris and cut back vegetation
SPITTALFIELD RIVER TAY	NO111408 - NO107408	Spittalfield Burn: runs through village of Spittalfield	Overgrown vegetation and overhanging trees both banks some vegetation in channel	Annual	Cut back vegetation from both banks and clear channel
MURTHLY (E) RIVER TAY	NO105379 - NO114380	Ditch/culverts: By Baldaroch Farm near Murthly - including New Ninevah	Overgrown vegetation and overhanging trees. Some erosion is occurring along system and vegetation in channel is resulting in siltation.	Minimum annual but also after heavy rainfall.	Thin vegetation in channel and monitor screen. Clear vegetation from both banks where required.
MURTHLY (E) RIVER TAY	NO103383	Un-named burn/culvert: Druids Park Murthly	Overgrown vegetation both banks. Debris on grid at inlet, grid poor design and condition.	3 Monthly	Vegetation on banks and in channel requires to be cut back. A new grid should be installed and debris cleared from inlet.
MURTHLY (E) RIVER TAY	NO098380	Un-named burn/culvert: beside Ardoch Cottages (B9099) Murthly	Overgrown vegetation both banks, overhanging trees on right hand bank some vegetation in channel.	3 Monthly	Vegetation requires to be cut back, from both banks and thinned in channel. Culvert could be surveyed as condition unknown
MURTHLY (E) RIVER TAY	NO098376	Un-named burn/culvert: Brooners Cottage, Near Ardoch	Overgrown vegetation and overhanging trees some vegetation in channel.	3 Monthly	Cut back and thin vegetation as and when required, ensure inlet clear.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
FIRTH OF TAY ABERNYTE (N)	NO266338 - NO267330	Burn: by Littleton Den off Coupar Angus/Dundee Road	Overgrown vegetation and overhanging trees on both banks. Some vegetation in channel but flowing fine.	Monitor grid after heavy rainfall check Annually.	Clear vegetation and overhanging branches as required. Monitor screen especially during heavy rainfall.
KEILLOUR POW WATER	NN977252 - NN975262	Keillour Burn: Going through Den of Keillour and Wester Keillour into Pow Water	Overgrown vegetation and over hanging trees both banks. Erosion along left hand bank, debris in channel on upstream side of U6 bridge. Stone Arch at NN976255 needs monitored.	Annual	Remove debris from upstream side of bridge. Monitor stone arch at NN976255.
BALDOWRIE	NO272395	Un-named burn/Culvert: Running between Baldowrie and Purlend Ruthven Water: Passes though Auchterarder.	Heavy vegetation and overgrown trees both banks some vegetation in channel. Grid clear at present.	Grid after heavy rainfall elsewhere annual	No work required but monitor grid after heavy rainfall.
AUCHTERARDER/ EARN	NN950124 - NN960133		Overhanging branches and overgrown vegetation both banks. Banks have collapsed in some areas. There is some trees across channel reducing flow. Downstream of Abbey Road Bridge there is overgrown vegetation and gravel build up.	Annual	Cut back vegetation and low hanging branches, clear channel of any obstructions. Monitor downstream of Abbey road Bridge.
AUCHTERARDER/ EARN	NN934162 - NN936166 NN004179 NN044184	Machany Water: Near Auchterarder Earn: Dalreoch Bridge and Forteviot Bridge	Overhanging trees both banks some trees have fallen in channel.	Annual	Remove fallen trees from channel
EARN	NN945165 NO004179	Earn: South Kinkell and Dalreoch Bridge	Overgrown vegetation and overhanging trees along river stretch. Some general erosion and some banks are collapsing. Some walls and embankments in various conditions along the channel. Some debris and vegetation in channel.	Annual	No maintenance required at present
LOCH EARN/EARN	NN701242 - NN698243	Struie Burn: St Fillans	Overgrown vegetation and overhanging trees right hand bank.	Annual	No maintenance required at present
LOCH EARN/EARN	NN702244 - NN699243	Alpha Phirnt Bhig: St Fillans	Overgrown vegetation and overhanging branches both banks, some vegetation in channel.	Annual	No maintenance required at present
LOCH EARN/EARN	NN735230 - NN695240	River Earn Dalchonzie to St Fillans	Overgrown vegetation and overhanging trees both banks.	Annual	Cut back vegetation and low hanging branches as required.
EARN	NN758210 - NN771217	Craggish Burn: The Ross (Comrie)	Overhanging trees and overgrown vegetation both banks. Some vegetation in channel, embankments in places.	Annual	Cut back and thin vegetation from banks and channel.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
EARN	NN735230 – NN773219	River Earn from near Dalchonzie to confluence with Water of Ruchill	Overgrown vegetation and overhanging trees both banks. Some walls and embankments along the channel. There is Himalayan Balsam and Japanese Knotweed present and debris in the channel as well as trees.	Annual	Remove trees when appropriate, clear debris and Himalayan Balsam and Japanese Knotweed.
EARN	NN773219 – NN818215	From confluence of Ruchill to Strowan	Overgrown/overhanging vegetation and trees both banks. Some general erosion along left hand bank. Japanese Knotweed and Himalayan Balsam along both banks, some vegetation in channel. Trees fallen across channel.	Annual	Failed trees should be removed (landowners should do this). Clear Japanese knotweed and Himalayan Balsam and any vegetation within the channel.
EARN	NN856236 - NN855217	Turret Burn: from distillery to confluence with Earn	Overhanging trees, overgrown vegetation both banks. Himalayan Balsam on right hand bank. Some low hanging branches affecting channel and some trees across water.	Annual	Remove any low hanging branches or fallen trees from banks and watercourse as required. Spray and strim Himalayan Balsam.
EARN	NN765244 - NN777220	River Lednock: Comrie	Flowing well at moment some overhanging trees and overgrown vegetation but not restricting flow. There has been a landslip which will in time require a permanent solution. There is also damage to the weir, consideration should be given to repair.	Annual	No maintenance required at moment but landslip will require permanent repair.
EARN	NN770208 - NN774219	Water of Ruchill: joins the Earn at Comrie	There are a large amount of trees in the channel. The channel has changed and the profile of the bed has changed causing flow in to change direction leading to erosion of banks. There is also a significant amount of Japanese Knotweed.	Monitor monthly	Remove fallen trees when required. Monitor the system and take necessary action.
EARN	NN852211 – NN853210	Un-named burn/culvert: Braidhaugh Crieff	Overgrown vegetation some overhanging trees both banks. Some vegetation in channel, Japanese Knotweed along banks.	Annual and after heavy rainfall	Thin vegetation and treat Japanese Knotweed.
EARN	NN872224 – NN877213	Un-named burn: Passes by Tomaknock and through Crieff	Overgrown vegetation and overhanging trees both banks. Japanese knotweed along left hand bank some vegetation in channel.	Annual	Treat Japanese knotweed. Clear vegetation from channel especially behind houses, camera culverted section behind Cairns Court.
EARN	NN993221 – NN994227	Un-named burn: Flows through Balgowan Saw Mill	Overgrown vegetation and overhanging trees both banks some vegetation in channel.	Annual	Cut back vegetation and clear from channel
EARN	NN926242 – NN944237	Fowls Burn/Downie Burn: Runs by Wester Fowls	Overgrown vegetation both banks and in channel	Annual	Cutback vegetation where required
EARN	NO136179 - NO134113	Small watercourse (Yellow Burn): Bridge of Earn	Heavily vegetated both banks but not restricting flow.	Annual	No maintenance required at present.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
EARN	NO123172 - NO132184	Deich Burn: Runs through Bridge of Earn and into River Earn	Overgrown vegetation both banks some overhanging trees along length. Some general erosion and undercutting along banks. Monitor flood banks, flap valves, duckbill valves.	Annual. Monitor valves 3 monthly.	Monitor banks to rear of the Cypress Inn. Maintain trees and vegetation along flood banks and thin as required, clear any debris in channel.
EARN	NO143121 – NO162170	River Farg	Overgrown vegetation and overhanging trees. Some slippage of embankments at times. Some walls, embankments along channel in various conditions. Some debris and trees in channel.	Annual	Clear any blockages and debris.
EARN	NO173114 – NO161131	Mill Burn: Run along side Gateside road and into the Farg	Some undercutting and erosion in places. Some branches in channel and some debris in places. Channel is flowing okay at present.	Annual	Monitor no action at present.
EARN	NN876161 – NN870167	Small burn near Lintibert, Muthill goes into Machany Water	Overgrown vegetation both banks. Channel dry at present, culverted section should be surveyed to ascertain condition.	Annual	Survey culverted section.
ALLAN WATER	NN834110 – NN839090	River Knaik - Braco	Overgrown vegetation and overgrown/overhanging vegetation both banks. Some vegetation growing in channel. Banks are overgrown with vegetation and overhanging trees. Some erosion in channel but water flowing well. Some erosion occurring on right hand bank.	Annual	No maintenance required at present.
ALLAN WATER	NN832097 – NN834091	Keir Burn - Braco	Overgrown vegetation and overhanging trees on both banks, with some vegetation in channel.	Annual	Cut back vegetation and clear debris as required.
ALLAN WATER	NN898089 – NN899090	Back Burn - Blackford	Overgrown vegetation along both banks. Work still required at site of Baxters to improve the channel. Channel generally flowing well.	Annual	Clear vegetation as required.
ALLAN WATER	NN893085 – NN895095	Danny Burn - Blackford	Overgrown vegetation and overhanging branches in various places, some vegetation in channel.	Annual	No maintenance required at present.
ALLAN WATER	NN892085 – NN891093	Allan Water - Blackford	Overgrown vegetation and overhanging branches in various places, some vegetation in channel.	Annual	Vegetation could be thinned.
ALLAN WATER	NN836065 - NN834078	Millstone Burn/Green Burn: Greenloaning	Overgrown vegetation and overhanging trees both banks. Some areas of bank are walled, there is vegetation growing in the channel, particularly heavy below rail bridge this is leading to some siltation.	Annual after heavy rainfall	Thin vegetation below railway bridge and cut back vegetation where required.
ALLAN WATER	NN840079 – NN822070	Allan Water – beside Greenloaning	Channel clear and flowing well. Erosion and undercutting continuing in places.	Annual	No maintenance required.

RIVER	GRID REF	DESCRIPTION	REMARKS	FREQ.OF INSPECTION	MAINTENANCE
CROOK OF DEVON/ RIVER DEVON	NO001030 - NO030008	River Devon: Crook of Devon	Some overgrown vegetation and overhanging trees. General erosion along river banks. Some embankments and gabions along river reasonable condition. Some vegetation in channel.	Annual	No maintenance required at present.
MILNATHORT/ LOCH LEVEN	NO113043 - NO127042	North Queich: through Milnathort	Overgrown vegetation both banks some vegetation in channel. Check flap valve at field at rear of Industrial Estate.	Annual	Vegetation could be cut back in places.
MILNATHORT/ LOCH LEVEN	NO113050 - NO131035	Fochy Burn/Back Burn: Passes through Milnathort.	Overgrown vegetation both banks especially agricultural areas. Some general erosion and undercutting along channel. Low hanging branches and overhanging trees in places. At present free flowing in village.	Monitor regularly especially after heavy rain.	Clear any vegetation/branches causing obstructions in channel. Monitor flap valves throughout village regularly.
KINROSS/ LOCH LEVEN	NO114017 - NO123015	South Queich: Kinross	Overhanging trees, overgrown vegetation some debris and vegetation in channel.	Annual	General clearance of debris and fallen branches.
KINROSS/ LOCH LEVEN	NO121034 - NO103034	Urry Burn: Kinross	Some overgrown vegetation and overhanging trees both banks. Some vegetation growing in channel. A lot of debris and fallen branches in wooded area	Annual	Clearance of wooded section to allow water to flow better. Re-survey piped sections.
KINROSS/LOCH LEVEN	NO118024 - NO120025	Clash Burn/Myre Burn: runs through Kinross	Overgrown vegetation and overhanging trees both banks some overgrown vegetation in channel. Some scrub along banks outfalls into Loch Leven. Check screen near Loch Leven.	Annual and after heavy rainfall	Clear scrub and any debris.
KINROSS/LOCH LEVEN	NO115020 – NO123016	Gelly Burn: Baleave	Overgrown vegetation both banks no restriction to flow though	Annual	No maintenance required
KINROSS/LOCH LEVEN	NT123994 – NT129995	Bog Burn: Near Gairney Bridge	Overgrown vegetation and overhanging trees both banks. Some vegetation in channel.	Annual	Cut back vegetation as required.
NR CLEISH/ LOCH LEVEN	NO084985 - NO104981	Gairney Water: near Cleish	Overgrown vegetation both banks some vegetation in channel.	Annual	Clear vegetation where required especially some sections of channel.
NR CLEISH/ LOCH LEVEN	NT018983 – NT023982	Gairney Water: near Powmill	Overgrown vegetation and overhanging trees both banks. General erosion both banks, vegetation and debris in channel.	Annual	Thin vegetation and clear channel where necessary.
NR CLEISH/ LOCH LEVEN	NT127986 – NT132988	Gairney Water: near Gairney Bridge	Overgrown vegetation both banks some vegetation in channel.	Annual	Vegetation could be thinned in channel.
CARNBO/LOCH LEVEN	NO050031 – NO056030	Braughty Burn: Carnbo	Overgrown vegetation and overhanging trees in various locations. General erosion occurring along banks and some vegetation in channel.	Annual	No maintenance required at present.

