

Flood Risk Management (Scotland) Act 2009

INTERIM REPORT

Local Flood Risk Management Plan

Highland and Argyll Local Plan District



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Contents

SUMMARY: Highland & Argyll LFRMP	11
Foreword	12
Background	13
Review of the plan	14
How current is the Plan?	14
Significant issues.....	15
Funding	15
Other actions.....	16
Prioritisation of actions for next plan cycle.....	16
Arrangements planned to deliver the remaining actions.....	16
Next steps	17
Conclusion	17
Assessment of progress.....	18
Progress with LPD-wide Actions.....	22
Progress with PVA-specific Actions.....	30
Thurso (Potentially Vulnerable Area 01/01)	31
Overview of actions to manage flooding in Thurso	31
Summary of progress of actions to manage flood risk in the Thurso (PVA 01/01)	32
Wick Airport (Potentially Vulnerable Area 01/02)	33
Overview of actions to manage flooding in Wick Airport.....	33
Summary of progress of actions to manage flood risk in the Wick Airport (PVA 01/02)	34
Burn of Newton (Potentially Vulnerable Area 01/03)	35
Overview of actions to manage flooding in Burn of Newton	35
Summary of progress of actions to manage flood risk in the Burn of Newton (PVA 01/03)	36
Wick Coastal (Potentially Vulnerable Area 01/04)	37
Overview of actions to manage flooding in Wick Coastal	37
Summary of progress of actions to manage flood risk in the Wick Coastal (PVA 01/04)	38
Lochinver (Potentially Vulnerable Area 01/05).....	40

Overview of actions to manage flooding in Lochinver.....	40
Summary of progress of actions to manage flood risk in the Lochinver (PVA 01/05).....	41
Golspie (Potentially Vulnerable Area 01/06).....	42
Overview of actions to manage flooding in Golspie	42
Summary of progress of actions to manage flood risk in the Golspie (PVA 01/06).....	43
Dornoch (Potentially Vulnerable Area 01/07).....	45
Overview of actions to manage flooding in Dornoch.....	45
Summary of progress of actions to manage flood risk in the Dornoch (PVA 01/07).....	46
Tarbat Ness (Potentially Vulnerable Area 01/08)	47
Overview of actions to manage flooding in Tarbet Ness	47
Summary of progress of actions to manage flood risk in the Tarbet Ness (PVA 01/08) ..	48
Invergordon (Potentially Vulnerable Area 01/09)	49
Overview of actions to manage flooding in Invergordon	49
Summary of progress of actions to manage flood risk in the Invergordon (PVA 01/09) .	50
Alness (Potentially Vulnerable Area 01/10)	51
Overview of actions to manage flooding in Alness	51
Summary of progress of actions to manage flood risk in the Alness (PVA 01/10)	52
Uig (Potentially Vulnerable Area 01/11)	53
Overview of actions to manage flooding in Uig	53
Summary of progress of actions to manage flood risk in the Uig (PVA 01/11)	54
Poolewe (Potentially Vulnerable Area 01/12)	55
Overview of actions to manage flooding in Poolewe	55
Summary of progress of actions to manage flood risk in the Poolewe (PVA 01/12)	56
Kinlochewe (Potentially Vulnerable Area 01/13)	57
Overview of actions to manage flooding in Kinlochewe	57
Summary of progress of actions to manage flood risk in the Kinlochewe (PVA 01/13) ..	58
Dingwall & Strathpeffer (Potentially Vulnerable Area 01/14).....	59
Overview of actions to manage flooding in Dingwall & Strathpeffer.....	59
Summary of progress of actions to manage flood risk in the Dingwall & Strathpeffer (PVA 01/14).....	60



Contin & Garve (Potentially Vulnerable Area 01/15).....	62
Overview of actions to manage flooding in Contin & Garve.....	62
Conon Bridge & Muir of Ord (Potentially Vulnerable Area 01/16).....	65
Overview of actions to manage flooding in Conon Bridge & Muir of Ord.....	65
Summary of progress of actions to manage flood risk in the Conon Bridge & Muir of Ord (PVA 01/16).....	66
Nairn West & Ardersier (Potentially Vulnerable Area 01/17)	68
Overview of actions to manage flooding in Nairn West & Ardersier	68
Summary of progress of actions to manage flood risk in the Nairn West & Ardersier (PVA 01/17).....	69
Nairn Central (Potentially Vulnerable Area 01/18).....	70
Overview of actions to manage flooding in Nairn Central.....	70
Summary of progress of actions to manage flood risk in the Nairn (PVA 01/18)	71
Inverness Airport (Potentially Vulnerable Area 01/19).....	73
Overview of actions to manage flooding in Inverness Airport.....	73
Summary of progress of actions to manage flood risk in the Inverness Airport (PVA 01/19).....	74
Smithton & Culloden (Potentially Vulnerable Area 01/20).....	75
Overview of actions to manage flooding in Smithton & Culloden.....	75
Summary of progress of actions to manage flood risk in the Smithton & Culloden (PVA 01/20).....	76
Inverness & the Great Glen (Potentially Vulnerable Area 01/21)	78
Overview of actions to manage flooding in Inverness & the Great Glen.....	79
Summary of progress of actions to manage flood risk in the Inverness & the Great Glen (PVA 01/21).....	80
Lochailort (Potentially Vulnerable Area 01/22)	86
Overview of actions to manage flooding in Lochailort	86
Summary of progress of actions to manage flood risk in the Lochailort (PVA 01/22)	87
Corpach (Potentially Vulnerable Area 01/23)	88
Overview of actions to manage flooding in Corpach	88
Summary of progress of actions to manage flood risk in the Corpach (PVA 01/23)	89

Caol & Inverlochy (Potentially Vulnerable Area 01/24)	90
Overview of actions to manage flooding in Caol & Inverlochy	90
Summary of progress of actions to manage flood risk in the Caol & Inverlochy (PVA 01/24).....	91
Fort William (Potentially Vulnerable Area 01/25).....	93
Overview of actions to manage flooding in Fort William	93
Summary of progress of actions to manage flood risk in the Fort William (PVA 01/25)..	94
Sunart & Moidart (Potentially Vulnerable Area 01/26).....	96
Overview of actions to manage flooding in Sunart & Moidart.....	96
Summary of progress of actions to manage flood risk in the Sunart & Moidart (PVA 01/26).....	97
South Ballachulish (Potentially Vulnerable Area 01/27).....	98
Overview of actions to manage flooding in South Ballachulish.....	98
Summary of progress of actions to manage flood risk in the South Ballachulish (PVA 01/27).....	99
Ballachulish & Glencoe (Potentially Vulnerable Area 01/28)	100
Overview of actions to manage flooding in Ballachulish & Glencoe	100
Summary of progress of actions to manage flood risk in the Ballachulish & Glencoe (PVA 01/28).....	101
Isle of Mull (Potentially Vulnerable Area 01/29).....	102
Overview of actions to manage flooding in Isle of Mull	102
Summary of progress of actions to manage flood risk in the Isle of Mull (PVA 01/29)..	103
Ross of Mull (Potentially Vulnerable Area 01/30)	104
Overview of actions to manage flooding in Ross of Mull	104
Summary of progress of actions to manage flood risk in the Ross of Mull (PVA 01/30)	105
Oban (Potentially Vulnerable Area 01/31)	106
Overview of actions to manage flooding in Oban	106
Summary of progress of actions to manage flood risk in the Oban (PVA 01/31)	107
Loch Feochan (Potentially Vulnerable Area 01/32)	109
Overview of actions to manage flooding in Loch Feochan.....	109



Summary of progress of actions to manage flood risk in the Loch Feochan (PVA 01/32)	110
Taynuilt (Potentially Vulnerable Area 01/33)	111
Overview of actions to manage flooding in Taynuilt	111
Summary of progress of actions to manage flood risk in the Taynuilt (PVA 01/33)	112
Loch Awe (Potentially Vulnerable Area 01/34)	114
Overview of actions to manage flooding in Loch Awe	114
Summary of progress of actions to manage flood risk in the Loch Awe (PVA 01/34)	115
Craignish (Potentially Vulnerable Area 01/35)	116
Overview of actions to manage flooding in Craignish	116
Summary of progress of actions to manage flood risk in the Craignish (PVA 01/35)	117
Kilmartin (Potentially Vulnerable Area 01/36)	118
Overview of actions to manage flooding in Kilmartin	118
Summary of progress of actions to manage flood risk in the Kilmartin (PVA 01/36)	119
Inveraray (Potentially Vulnerable Area 01/37)	120
Overview of actions to manage flooding in Inveraray	120
Summary of progress of actions to manage flood risk in the Inveraray (PVA 01/37)	121
Lochgilphead (Potentially Vulnerable Area 01/38)	122
Overview of actions to manage flooding in Lochgilphead	122
Summary of progress of actions to manage flood risk in the Lochgilphead (PVA 01/38)	123
Tarbert (Potentially Vulnerable Area 01/39)	124
Overview of actions to manage flooding in Tarbert	124
Summary of progress of actions to manage flood risk in the Tarbert (PVA 01/39)	125
Campbeltown (Potentially Vulnerable Area 01/40)	126
Overview of actions to manage flooding in Campbeltown	127
Summary of progress of actions to manage flood risk in the Campbeltown (PVA 01/40)	128
Other actions	130
Conon Bridge Flood Defence Improvements	130

Kirkhill Watercourse Diversion Scheme.....130

Clachan Flood Study.....130

Halkirk Surface Water Management Plan.....130

Appendix 1:.....132

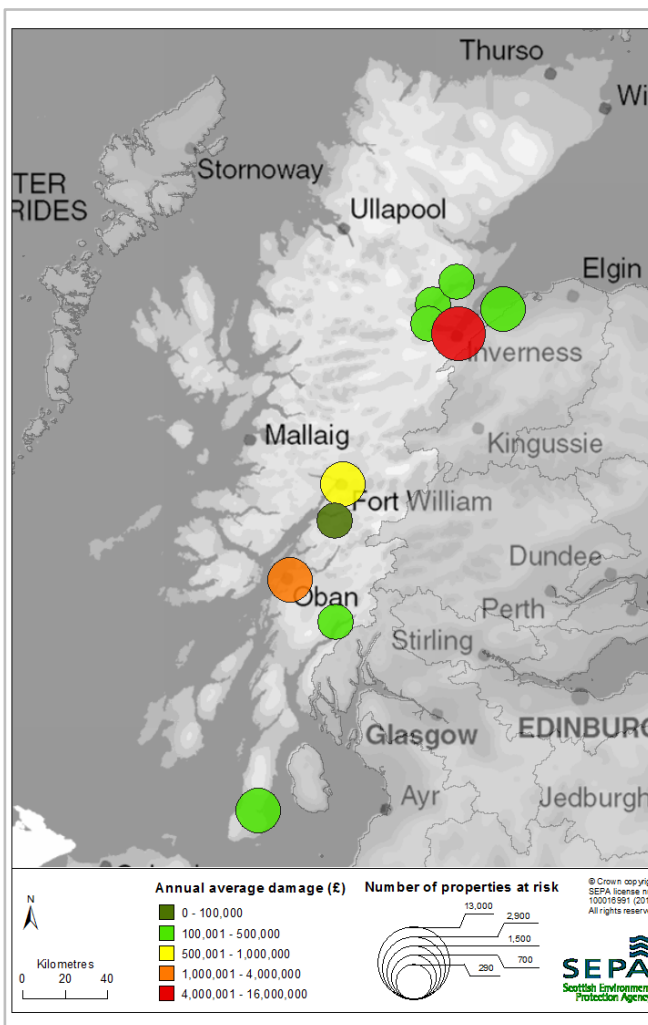
Flood risk management responsibilities in Scotland and the legal requirement for the publication of this INTERIM REPORT.....132

Appendix 2:.....136

Publication details.....136



SUMMARY: Highland & Argyll LFRMP



Reproduced from Highland & Argyll Local Plan District Flood Risk Management Strategy, SEPA (December 2015)

Local Plan District

The Highland and Argyll Local Plan District covers the north and north-west of mainland Scotland together with the majority of the islands off the west coast. It contains two local authorities The Highland Council and Argyll and Bute Council, and small areas of the Cairngorms and Loch Lomond and the Trossachs National Park. It has an area of approximately 29,000km² and a coastline of approximately 4,190km. There are forty Potentially Vulnerable Areas in the Local Plan District.

Action	No.
Flood protections scheme/works	13
Natural flood management works	0
New flood warning	0
Flood protection study	11
Natural flood management study	1
Surface water plan/study	8
Strategic mapping and modelling	12
Maintain flood protection scheme	5
Maintain flood warning	19
Flood forecasting	LPD wide
Property level protection scheme	0
Community flood action groups	2
Self help	LPD wide
Awareness raising	LPD wide
Maintenance	LPD wide
Site protection plans	3
Emergency plans/response	LPD wide
Planning policies	LPD wide
Integrated Catchment Study	1
Section 16 assessment	21

Foreword

This INTERIM REPORT to the Local Flood Risk Management Plan shows the progress made in delivering the actions to avoid and reduce the risk of flooding, and prepare and protect ourselves and our communities across the local plan district.

“The impacts of flooding experienced by individuals, communities and businesses can be devastating and long lasting. It is vital that we continue to reduce the risk of any such future events and improve Scotland’s ability to manage and recover from any events which do occur.” Highland & Argyll Local Flood Risk Management Plan, June 2016

The publication of the INTERIM REPORT shows that the coordinated and collaborative efforts of public bodies can be brought together to deliver sustainable outcomes.

The INTERIM REPORT is published by The Highland Council on behalf of a partnership comprising five local authorities: The Highland Council; Argyll & Bute Council; as well as Scottish Water; SEPA; Cairngorms National Park Authority; Loch Lomond and Trossachs National Park Authority and Forestry Commission Scotland.

Individuals are the first line of defence against flooding and have responsibilities to protect themselves from flooding. Through self-help and property level protection, awareness raising and signing up to Floodline, individuals, businesses and communities can make key contributions to the delivery of the actions in the Plan which are detailed in this INTERIM REPORT.

Since the publication of the Plan in June 2016, public sector finances in Scotland have continued to be under considerable pressure. This places an even greater responsibility on SEPA, local authorities and Scottish Water and other responsible authorities to deliver their flood risk management responsibilities and in particular the actions in the Plan, to manage flooding in a sustainable way.

SEPA, local authorities and Scottish Water and other responsible authorities will continue to work collaboratively to implement the actions in the Plan to its conclusion in June 2022.

Background

The INTERIM REPORT is a legal requirement of the Flood Risk Management (Scotland) Act 2009 (Section 37). The INTERIM REPORT is required to be published between June 2018 and June 2019. The INTERIM REPORT includes the conclusions of a review of the Highland & Argyll Local Flood Risk Management Plan (the 'Plan'), published in June 2016 and includes information on the progress that has been made towards implementing the actions identified in the Plan.

Further details on flood risk management responsibilities in Scotland and the legal requirement for the publication of this INTERIM REPORT can be found in Appendix 1.

A copy of the Highland & Argyll Local Flood Risk Management Plan can be found at the follow link.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Review of the plan

This section sets out the conclusions of the review of the plan and a summary of progress of actions detailed in Highland & Argyll Local Flood Risk Management Plan. It draws upon the assessment of progress of actions presented in the subsequent sections.

Key progress in reducing the impacts of flooding since publication

- Contract award and commencement of the Smithton & Culloden Flood Protection Scheme.
- Construction of a flood diversion channel on the River Gynack, reducing the risk of flooding to Kingussie
- Preliminary approval of a Flood Protection Scheme for Caol
- Development of a Flood Protection Scheme for Drumnadrochit
- Good progress on Flood Protection Studies for Dingwall, Thurso, Golspie, Kingussie, Inverness (Mill Burn) and Nairn
- Development of Surface Water Management Plans for Newtonmore, Halkirk, Caol, Dingwall & Strathpeffer,
- Good progress on an Integrated Catchment Study for Inverness
- Coordinated Awareness Raising activities between SEPA and local authorities
- Flood forecasting and warning has been extended in certain areas and made more resilient in others.
- Development of a Flood Protection Scheme for Campbeltown.
- Good progress on Flood Protection Studies for Oban, Tarbert, and Lochgilphead.
- Progress with Surface Water Management Plans for Campbeltown and Oban

How current is the Plan?

The Plan was published in June 2016 supplementing the Flood Risk Management Strategy published by SEPA in December 2015. The Plan details how the actions identified in the Strategy were to be implemented over the period 2016 to 2022. The Strategy and Plan are based on the National Flood Risk Assessment and the designated Potentially Vulnerable Areas at that time.

Since the identification of the actions in the Plan, there have and continue to be advancements in our knowledge and development of assessment techniques. These include the publication by SEPA of a new National Flood Risk Assessment and revised designation of Potentially Vulnerable Areas in December 2018. These advancements may inform the delivery of the actions in this Plan and will be used in the development of future Strategies and Plans.

It is therefore considered that the Plan on which this is the INTERIM REPORT is based is current, albeit the planned delivery and actual delivery of actions has changed for some actions as detailed in the 'Assessment of the progress of actions'.

Significant issues

Based on a review of the assessment of the progress of actions detailed in this INTERIM REPORT, the following key themes and issues have been identified that have or may have an impact on the delivery of actions to manage flood risk. Arrangements planned to deliver the remaining actions are described below. Where these issues have had an impact on the delivery of specific actions or actions across an LPD, this is detailed in the 'Assessment of the progress of actions'.

Funding

The level of funding from Scottish Government to local authorities for flood risk management activities has been at the levels anticipated. As per the principals of financial settlements for local government, the funding is not 'ring fenced' and local authorities may have allocated these funds to the delivery of other priorities.

The Highland Council underwent a significant review of capital and revenue funding throughout 2017, culminating in the approval of a new revenue budget being approved in November 2017, followed by a new capital budget plan in March 2018. These changes reduced funding towards flood risk management which has led to some actions being either delayed (due to funding uncertainty) or postponed (due to funding withdrawal).

Revenue funding for flood prevention by Argyll and Bute Council has remained steady since the implementation of the LFRMP. Additional funding has been made available to allow all Cycle 1 flood studies and surface water management plans associated with PVAs to proceed. Scottish Government funding for flooding is not ring fenced - this presents ongoing challenges to secure capital funding to support Flood Schemes.

The Highland Council has a fully resourced Flood Risk Management Team to progress the actions in the plan (funding permitted).

Argyll and Bute Council has prioritised its resources to support ongoing Flood Scheme development and Flood Studies/Surface Water Management Planning.

Other actions

The Highland Council has taken advantage of opportunities driven by developer contributions to progress flood defence improvements to South Kessock (Inverness) and Conon Bridge.

Prioritisation of actions for next plan cycle

Many actions contained in the plan are to undertake studies that will assess the need for further actions to be implemented in future plans. For example, a flood protection study may recommend that a community flood action group is set up to increase resilience to flooding, or that a flood defences are constructed. This introduces a deadline date by when such actions need to be detailed and submitted by responsible authorities for consideration as actions in the next plans from 2022-28. The deadline date for submission of these actions to SEPA has been set as December 2019. The actions submitted will then be assessed and prioritised against the flood risk objectives, and consulted upon ahead of the publication of the next cycle of Flood Risk Management Strategies in December 2021 and Local Flood Risk Management Plans in June 2022. Any actions that miss this deadline may therefore be delayed for consideration in the next cycle from 2028-34.

Arrangements planned to deliver the remaining actions

The actions in the Plan will continue to be delivered over the remainder of the 2016 to 2022 period. This will be as per the published Plan, subject to revisions in deliver dates as detailed in the 'Assessment of the progress of actions' section of this INTERIM REPORT.

Due to funding constraints the Fort William Flood Protection Study; Tarbet Ness Flood Protection Study and Upper River Ness Flood Protection Study are the only actions The Highland Council is anticipating not delivering (as planned) during this cycle. Unless future capital programme reviews can allocate funds towards these measures the actions will be carried forward for prioritisation in the second cycle. In the meantime, the area benefits from a Flood Warning Scheme and awareness raising activities will be carried out to ensure the properties potentially at risk are resilient.

The requirement for updating the coastal and surface water maps has changed significantly since the Local Flood Risk Management Plan was published in June 2016. In the case of coastal mapping, SEPA is now updating coastal flood maps across the whole of Scotland (commencing in the northeast of Scotland) rather than in a few isolated sections of coast. It is planned that the improvements for the northeast (Scrabster to Montrose) will be completed in 2019. This includes locations on the east coast of the Highland and Argyll

Local Plan District. For the remainder of the Local Plan District, the coastal mapping is currently planned to be updated in the second cycle (except in Inveraray and Taynuilt where interim updates are to be completed in this cycle). For surface water flooding, the underlying design rainfall data used to produce the flood maps has changed as a result of more data being collected and a better understanding of rainfall across Scotland. As such it is no longer considered appropriate to deliver updated flood maps for the relatively small areas identified in the Local Flood Risk Management Plan. Instead SEPA will deliver a national update of this product. Due to the increase in scope it is expected that the national updates to the surface water maps will be completed early in the next cycle.

Next steps

A Final Report on the plan will be published in between July 2021 and June 2022. This will include an updated assessment of the progress made towards implementing the current actions, a summary of the current measures which were not implemented, with reasons for their non-implementation; and a description of any other measures implemented since the plan was finalised which the lead authority considers have contributed to the achievement of the flood risk objectives.

In the meantime, to find out more about how flood risk is being managed please contact The Highland Council Flood Risk Management Team.

Conclusion

In conclusion of the review of the Plan, it is clear that the Local Flood Risk Management Plan (2016-2022) remains current and relevant. In some areas, other additional work has been carried out in response to opportunities and unforeseen circumstances.

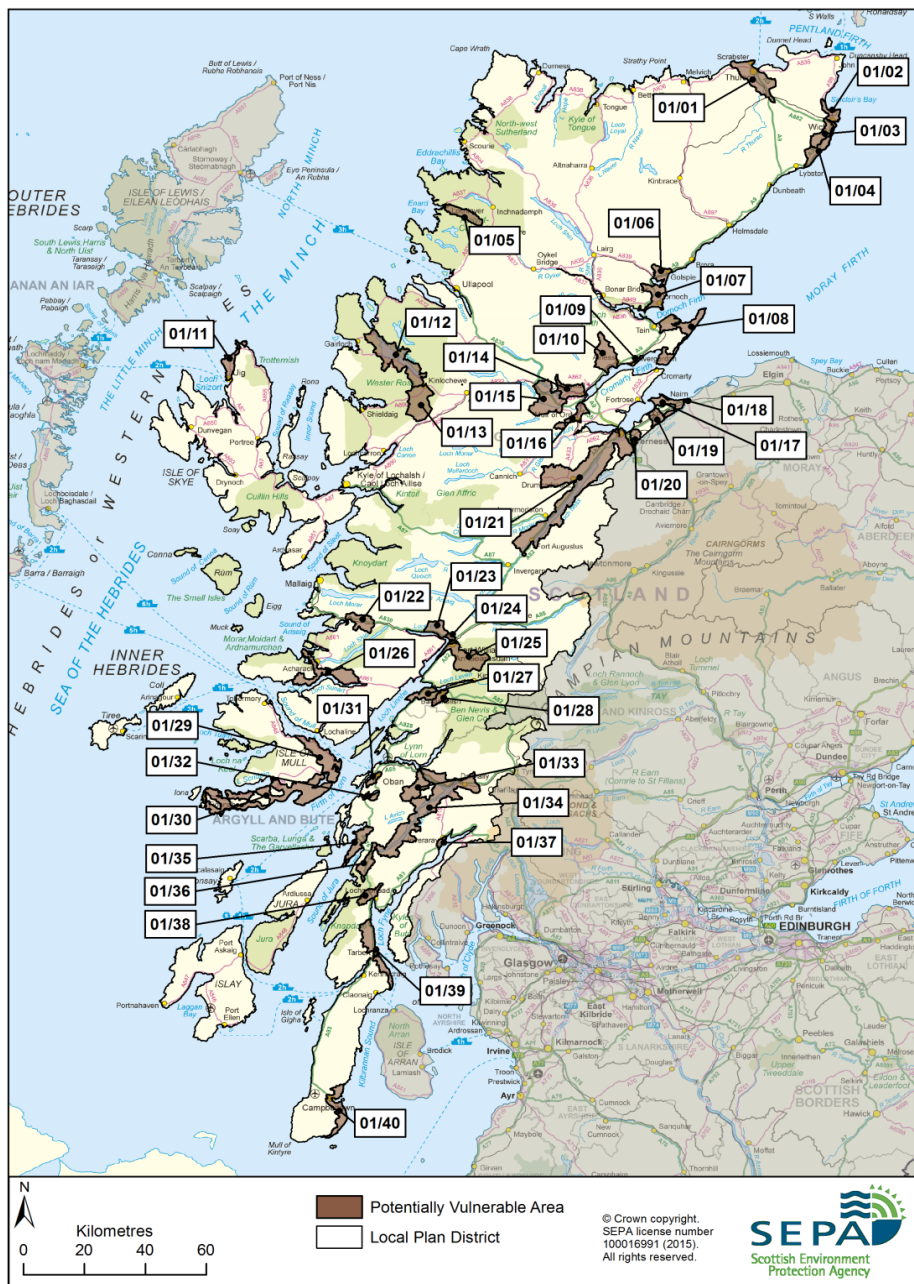
This INTERIM REPORT provides details on the progress that has been made in implementing the measures identified in the Plan, nearly three years after publication.

In general, significant measureable progress has been made by all responsible authorities across the Local Plan District. It is clear that the number of prioritised actions set out in the Plan in 2016 was ambitious for all responsible authorities and minor issues around timing, resources and/or funding have had an effect on the progress of some actions. A small number of actions are now not expected to be completed this cycle as planned. Any outstanding actions will be carried forward for appraisal in the prioritisation of measures for the next Local Flood Risk Management Plan.

Assessment of progress

This section sets out an assessment of the progress towards implementing the actions set out in the Highland & Argyll Local Flood Risk Management Plan (LFRMP).

There are actions that apply across the whole of the Highland & Argyll Local Plan District (LPD) and actions that are specific to each of the 40 Potentially Vulnerable Areas (as defined under Section 13 of the Act) in the Highland & Argyll Local Plan District which are shown below in Figure 1- Highland & Argyll Local Plan District with Potentially Vulnerable Areas (below).



Reproduced from Highland & Argyll Local Plan District Flood Risk Management Strategy, SEPA (December 2015)

The actions that apply to individual PVA across the Highland & Argyll Local Plan District are shown overleaf in Figure 2. The summary of the assessment of progress is shown using the traffic light system, where each item is marked as Red, Amber or Green (RAG) and where:

- **GREEN** – Action has been delivered and/or is on programme and within budget;
- **AMBER** – Action is behind programme and/or over budget, but the key dates are still anticipated to be met.
- **RED** – Action is behind programme and/or over budget, with key dates unlikely to be met and/or the outputs unlikely to achieve what was anticipated by the LFRMP.

	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
Highland Council PVA's																		
Thurso (01/01)				G			G			G			A	G	G		G	G
Wick Airport (01/02)							A		G	G			A	G	G		G	G
Wick- Burn of Newton (01/03)							A			G			A	G	G		G	G
Wick Coastal (01/04)							R		G	G			A	G	G		G	G
Lochinver (01/05)										G			A	G	G	G	G	G
Golspie (01/06)				G			R		G	G		G	A	G	G		G	G
Dornoch (01/07)									G	G			A	G	G		G	G
Tarbet Ness (01/08)				R			A		G	G			A	G	G		G	G
Invergordon (01/09)							A		G	G			A	G	G		G	G
Alness (01/10)							A		G	G			A	G	G	G	G	G
Uig (01/11)										G			A	G	G		G	G
Poolewe (01/12)										G			A	G	G		G	G
Kinlochewe (01/13)										G			A	G	G		G	G
Dingwall & Strathpeffer (01/14)				G		G	A	G	G	G			A	G	G		G	G
Contin & Garve (01/15)	G						G		G	G			A	G	G	G	G	G
Conon Bridge & Muir of Ord (01/16)							G	G		G			A	G	G		G	G
Nairn West & Ardersier (01/17)							G		G	G			A	G	G		G	G
Nairn Central (01/18)				A			G		G	G			A	G	G		G	G
Inverness Airport (01/19)							G			G			A	G	G		G	G
Smithton & Culloden (01/20)	G					G	G			G			A	G	G		G	G
Inverness & Great Glen (01/21)	A			R	G	G	G	G	G	G		G	A	G	G		G	G
Lochailort (01/22)	G									G			A	G	G		G	G
Corpach (01/23)	G					G	G		G	G			A	G	G		G	G
Caol & Inverlochy (01/24)	A					G	G		G	G			A	G	G		G	G
Fort William (01/25)	G			R		G	G		G	G			A	G	G		G	G
Sunart & Moidart (01/26)										G			A	G	G		G	G
South Ballachulish (01/27)										G			A	G	G		G	G



Argyll & Bute Council PVA's	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
Ballachulish & Glencoe (01/28)	G									G			A	G	G		G	G
Craignure, Mull (01/29)										G			A	G	G		G	G
Ross of Mull (01/30)										G			A	G	G		G	G
Oban (01/31)				G		G	G		G	G			A	G	G		G	G
Loch Feochan (01/32)										G			A	G	G		G	G
Taynuilt (01/33)	G						A			G			A	G	G		G	G
Loch Awe (01/34)	G						G			G			A	G	G		G	G
Craignish (01/35)										G			A	G	G		G	G
Kilmartin (01/36)										G			A	G	G		G	G
Inveraray (01/37)	G						G			G			A	G	G		G	G
Lochgilphead (01/38)				G			G		G	G			A	G	G		G	G
Tarbert (01/39)				G			G		G	G			A	G	G		G	G
Campbeltown (01/40)	G					G	G		G	G			A	G	G		G	G

Figure 2: Summary of progress of actions to manage flood risk in the Potentially Vulnerable Areas of the Highland & Argyll Local Plan District



Progress with LPD-wide Actions

This section sets out an assessment of the progress towards implementing actions that apply across the whole of the Highland & Argyll Local Plan District over all the full duration of the six-year Plan. This is presented in Figure 3 below.

Action	Status	Description	Delivery Lead	Interim progress	Planned actions to complete
Flood forecasting	G	<p>Flood Alert Areas within the LPD are:</p> <ul style="list-style-type: none"> • Argyll & Bute • Caithness & Sutherland • Easter Ross & Great Glen • Skye & Lochaber • Wester Ross 	SEPA	SEPA has continued to operate the Scottish Flood Forecasting Service (SFFS) Partnership with the Met Office with daily, national flood guidance statements issued to Category 1 and 2 agencies (such as emergency responders, local authorities and other organisations with flooding management duties). Each daily statement gives an assessment of the risk of flooding for the next five days to help enable these organisations to put preparations in place to reduce the impact of flooding. SEPA's Flood Alert service is freely available to everyone and helps enable communities to be aware and prepared to reduce the impacts of flooding.	SEPA will continue and improve the Scottish Flood Forecasting Service (SFFS) with the Met Office, with daily flood guidance statements and flood alerts issued as required to enable communities and responders to reduce the impacts of flooding.

Maintenance	G		Responsible Authorities	<p>The Highland Council inspects watercourses within its region according to an inspection regime which also includes formal flood defences. The Highland Council's Schedule of clearance and repair works are published online at:</p> <p>https://www.highland.gov.uk/info/1226/emergencies/81/flooding/5</p> <p>Argyll and Bute Council are developing a strategy for prioritising the assessment and clearing of watercourses that is appropriate to the geography, vulnerability/risk and resources available, focussing on the most vulnerable and potentially affected areas.</p>	
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Emergency plans/ response	G		Responsible Authorities	<p>The Highland Council Emergency Planners have in place and maintain Emergency Plans for all contingencies. The Highland Council is a member of the Highlands & Islands Local Resilience Partnership (HILRP).</p> <p>Argyll and Bute Council similarly have civil response plans in place and provide flood advice for property owners and landowners on our website including relevant guidance from Scottish Water, SEPA, The Scottish Government, and the Scottish Flood Forum. Argyll & Bute Council is a member of the West of Scotland Regional Resilience Partnership.</p> <p>Working in partnership with the Local Authorities and other Agencies, Scottish Flood Forum initiate and operate a single point of contact, with appropriate voluntary sector resources, to respond quickly and professionally to individual and corporate needs, to those affected by flooding in both the city and extended rural communities. Including the development of a community resilience programme.</p>	
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Emergency plans/ Response (cont.)	G		Responsible Authorities	This includes help, support and advice during the subsequent recovery period. Debt, Insurance Claims, non-insured properties, property flood protection, listening ear and understanding of flood trauma. Distribution of information newsletters, fact sheets and other relevant data. Ensuring property repairs and processes are done correctly and to the appropriate standards. Provide a snagging programme and support to those who require it.	
Self help	A	Property and business owners taking simple steps to reduce damage and disruption during flooding.	Property Owner/ Manager	<p>The Highland Council and Argyll & Bute Council work with Scottish Flood Forum to recommend areas which might benefit from independent Property Level Protection surveys and recommendations.</p> <p>Scottish Flood Forum promotes self-help within communities through Property Level Protection (PLP) exhibitions, and advice regarding the selection, surveys and appropriate and relevant information to enable clients to make the right decisions. Ongoing community PLP training, Flood Warden and resilience group promotion.</p>	

Awareness raising	G		Responsible Authorities	<p>The Highland Council, working with SFF and SEPA have begun developing a strategy for encouraging community resilience across the Highlands. The Highland Council continues to engage local members, community councils, schools and the public where Flood Protection Studies and Schemes are being carried out and aims to coordinate these events with SEPA and SFF.</p> <p>The Scottish Flood Forum (SFF) is in discussion with Highland Council and SEPA on work to engage flood risk communities. The SFF produced 3 flood risk community focussed newsletters which were sent to group and individuals across Scotland. The SFF promoted and delivered 3 peer to peer flood risk community networking events</p> <p>SEPA's principle awareness raising approaches have been through:</p> <ol style="list-style-type: none"> 1. Direct campaigning and general awareness raising 2. Education and tools 3. Partnership delivery development 	<p>SEPA will continue to raise awareness of flood risk through direct campaigning, general awareness raising, developing education and engagement tools, creating new partnerships and improving its flood forecasting and warning services (e.g. Scottish Flood Forecasting Service and Floodline). This will continue with many of the actions reported for the interim progress summary. Further information is contained within SEPA's Flood Warning Development Framework, published in 2017 and for the period 2017 to 2021. Raising Awareness will form part of each of the 3 key themes identified:</p> <ul style="list-style-type: none"> • Aim 1: Maintenance of existing and delivery of new flood warning schemes. • Aim 2: Development and innovation. • Aim 3: Engagement with partners and customers
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<p>Awareness raising (cont.)</p>	<p>G</p>		<p>Responsible Authorities</p>	<p>Forestry Commission Scotland (FCS) continues to engage with the responsible authorities to make sure that the contribution of woodlands and forestry is recognised when natural flood management measures are promoted. Interactions with the public are sought at public National events (for example the Royal Highland Show) and regional/local events (for example the Turiff Show) to highlight the role that trees and woodland have in contributing to managing flood risk. This includes working with facilitators (from the charitable sectors and businesses) to help partnership initiatives that aim to improve public resilience to flood risk and to make sure that the communities have access to information and help/support. We continue to work on partnership initiatives to spatially identify where woodland can be planted and managed - these include the local communities. Forest Enterprise Scotland (the agency of Forestry Commission Scotland) engages with communities, NGOs and statutory stakeholders on the revision of Land Management Plans. Flooding is part of these catchment-focused discussions where our planners raise awareness of the benefits that Transpiration of heavy rain into the forest soils and geology.</p> <p>trees and forestry can bring to flooding and the associated reduction of peak flows 1) Evaporation of rainfall from canopy and 2)</p>	<p>Forestry Commission Scotland plan to:</p> <ul style="list-style-type: none"> • continue to improve FCS regional knowledge on flood risk and the potentially vulnerable areas; • to identify opportunities for forestry projects across the country • continue to engage with local communities through the revision of Land Management Plans
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<p>Planning Policy</p>	<p>G</p>		<p>Responsible Authorities</p>	<p>All Planning Authorities within the LPD continue to ensure that new developments satisfy relevant guidance and policies on flooding and drainage.</p> <p>Argyll and Bute Council are reviewing the existing Local Development Plan (LDP), with a programme for adoption of a revised plan by 2020, which will take into account the latest guidance from SEPA, the Scottish Government, and Local Flood Risk Management Plan actions in potentially vulnerable areas (PVAs), local flood risk areas, and known potential flood scheme areas.</p> <p>SEPA exercises its planning functions with a view to reducing overall flood risk. We effectively contribute to the delivery of sustainable flood risk management and we support the delivery of FRM Strategies and local FRM Plans. In line with the management actions that accord with national planning policies we will object to development at medium to high risk of flooding when it is contrary to the risk framework set out in Scottish Planning Policy.</p>	
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Planning Policy (cont.)	G		Responsible Authorities	We will also continue to engage at the offset of the development plan process and encourage planning authorities to undertake a Strategic Flood Risk Assessment to inform their spatial strategy.	
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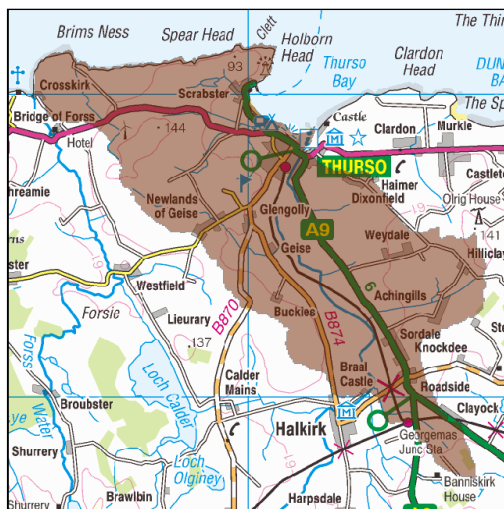
Figure 3: Progress with LPD-wide Actions for the Highland & Argyll

Progress with PVA-specific Actions

This section sets out an assessment of the progress towards implementing actions that are specific to each of the 40 Potentially Vulnerable Areas as shown in Figure 2. Assessments of the progress of actions within each PVA are presented.

Thurso (Potentially Vulnerable Area 01/01)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Thurso



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Summary of Progress for Thurso

There are approximately 10 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £77,000. Further information can be found in LFRMP under PVA 01/01.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study, including detailed modelling of the fluvial and coastal flood risk is ongoing

Overview of actions to manage flooding in Thurso

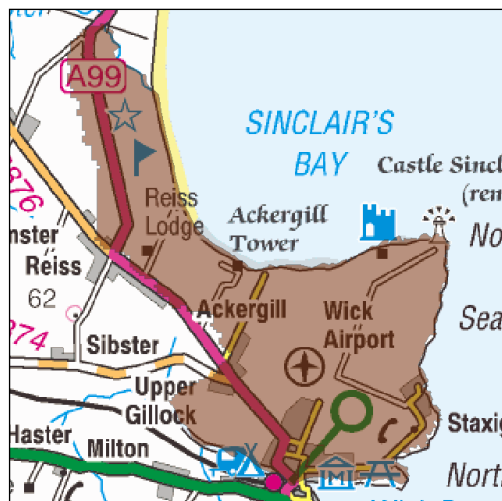
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/01				G			G			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Thurso (PVA 01/01)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	The Highland Council will undertake a hydraulic study to improve understanding of river (River Thurso) and coastal flood risk in Thurso.	THC	2016-19	A Flood Protection Study to assess the fluvial and coastal flood risk in Thurso is ongoing. A detailed hydraulic model has been built for the assessment of damages and potential options.	Wider stakeholder engagement and a Public Exhibition are planned for early 2019. The study is yet to complete the economic (damages) assessment, identification of possible options, consultation and outline design of preferred option.
Strategic mapping and modelling	G	Investigation and modelling of sewer catchments in Thurso and Halkirk.	Scottish Water	2016-20	The Scottish Water assessment of flood risk within the sewer catchment has started. The assessment will improve knowledge and understanding of surface water flood risk. On track to deliver within agreed LFRMP timescales	

Wick Airport (Potentially Vulnerable Area 01/02)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Wick Coastal



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Summary of Progress for Wick Airport

Fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £10,000. Further information can be found in LFRMP under PVA 01/02.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Wick Flood Warning Area

Overview of actions to manage flooding in Wick Airport

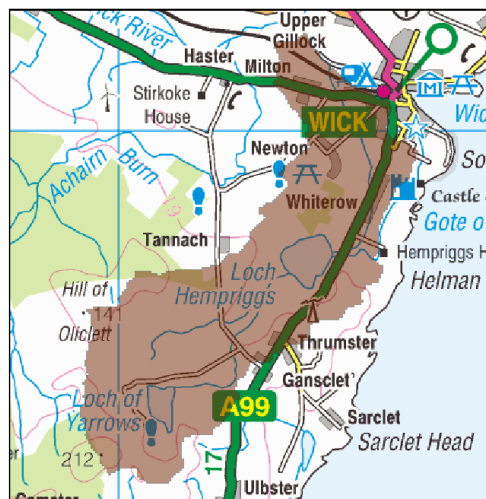
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/02							A		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Wick Airport (PVA 01/02)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Maintain Flood Warning	G	SEPA will maintain the Wick flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service.	SEPA will continue to operate the flood warning service.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Wick sewer catchment.	Scottish Water	2016-2020	The Scottish Water assessment of flood risk within these sewer catchments has been delayed. The assessment will improve knowledge and understanding of surface water flood risk.	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1.

Burn of Newton (Potentially Vulnerable Area 01/03)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Wick



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Summary of Progress for Burn of Newton

There are approximately 40 residential properties and fewer than 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £190,000. Further information can be found in LFRMP under PVA 01/03.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Investigation and development of improved flood risk modelling for the Burn of Newton

Overview of actions to manage flooding in Burn of Newton

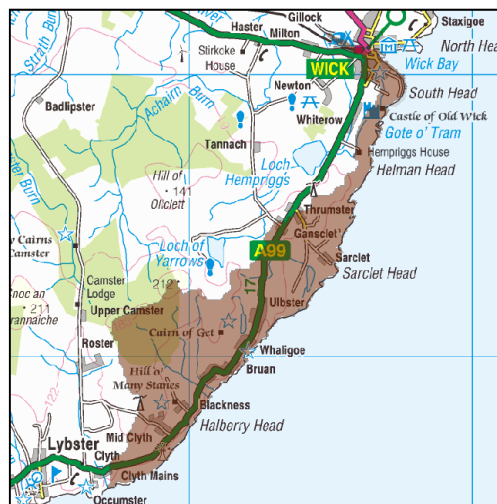
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/03							A			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Burn of Newton (PVA 01/03)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	A	SEPA will develop the flood hazard mapping in the area of Loch Hempriggs to the confluence with the Wick River to reduce flood risk from the Mill Laide.	SEPA	2016-17	Following a screening exercise to characterise the catchment and identify the data necessary to support mapping improvements, a topographic survey of the catchment has been undertaken. A modelling project is currently underway which will enable a revision of the river flood hazard mapping within this catchment.	It is planned to complete this action by the end of 2018.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Wick sewer catchment.	Scottish Water	2016-20	The Scottish Water assessment of flood risk within the sewer catchment has not yet started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales

Wick Coastal (Potentially Vulnerable Area 01/04)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Wick/ Wick Coastal



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Summary of Progress for Wick Coastal

There are approximately 40 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £400,000. Further information can be found in LFRMP under PVA 01/04.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Wick Flood Warning Area
- Investigation and development of improved flood risk modelling for the Burn of Newton

Overview of actions to manage flooding in Wick Coastal

	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
PVA 01/04							R		G	G			A	G	G		G	G

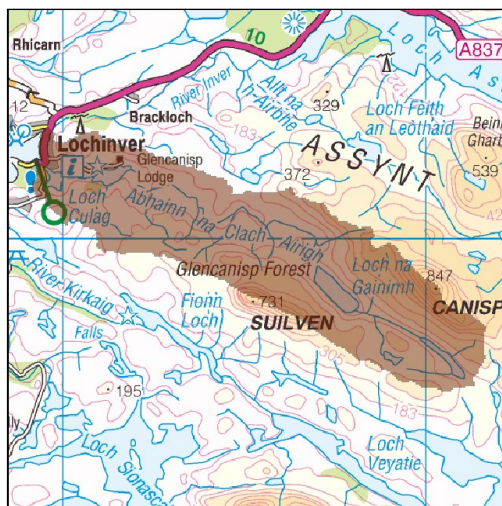
Summary of progress of actions to manage flood risk in the Wick Coastal (PVA 01/04)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Maintain Flood Warning	G	SEPA will continue to maintain the 'Wick' flood warning area.	SEPA	ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Strategic mapping and modelling	R	SEPA will improve surface water flood maps in Wick.	SEPA	2018	Surface water: SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer consider appropriate to deliver this action as originally intended.	Surface water: This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2. Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.

Strategic mapping and modelling	A	SEPA will develop the flood hazard mapping in the area of Loch Hempriggs to the confluence with the Wick River to reduce flood risk from the Mill Laide.	SEPA	2016-17	Following a screening exercise to characterise the catchment and identify the data necessary to support mapping improvements, a topographic survey of the catchment has been undertaken. A modelling project is currently underway which will enable a revision of the river flood hazard mapping within this catchment.	It is planned to complete this action by the end of 2018.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Wick sewer catchment.	Scottish Water	2016-20	The Scottish Water assessment of flood risk within these sewer catchments has been delayed. The assessment will improve knowledge and understanding of surface water flood risk.	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1.

Lochinver (Potentially Vulnerable Area 01/05)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Abhainn na Clach Airigh



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Summary of Progress for Lochinver

There are approximately 10 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £140,000. Further information can be found in LFRMP under PVA 01/05.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Developing a strategy for raising awareness and community resilience

Overview of actions to manage flooding in Lochinver

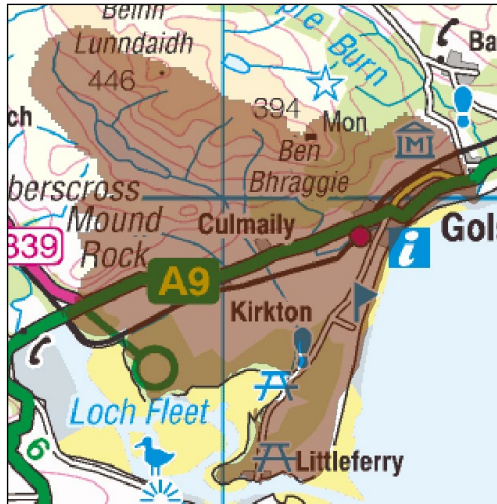
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/05										G			A	G	G	G	G	G

Summary of progress of actions to manage flood risk in the Lochinver (PVA 01/05)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Site Protection Plan	G	The Highland Council will work with the management of a school, and provide advice in the development of a site protection plan.	THC	2016-20	The Highland Council working with SFF and SEPA have begun developing a strategy for encouraging community resilience across the Highlands.	The Highland Council will liaise directly with schools/ community assets to encourage and support a specific site protection/ flood resilience plan.

Golspie (Potentially Vulnerable Area 01/06)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Golspie Coastal



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Summary of Progress for Golspie

There are approximately 60 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £190,000. Further information can be found in LFRMP under PVA 01/06.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study, including detailed modelling of the fluvial and coastal flood risk is ongoing

Overview of actions to manage flooding in Golspie

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/06				G			R		G	G		G	A	G	G		G	G

Summary of progress of actions to manage flood risk in the Golspie (PVA 01/06)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	The Highland Council will undertake further hydraulic modelling of coastal flooding and carry out a Flood Protection Study to assess the benefits of improved defences along the town frontage to reduce coastal flood risk.	THC	2016-19	A Flood Protection Study to assess the coastal flood risk in Golspie is ongoing. A detailed hydraulic model has been built for the assessment of damages and potential options.	Wider stakeholder engagement and a Public Exhibition are planned for Autumn 2018. The study is yet to complete the economic (damages) assessment, identification of possible options, consultation and outline design of preferred option.
Strategic mapping and modelling	R	SEPA will incorporate additional surface water hazard mapping information into the flood maps to improve understanding of flood risk.	SEPA	2018	Surface water: SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer considered appropriate to deliver	Surface water: This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2. Alongside this SEPA is investigating the feasibility of developing an interim approach

					this action as originally intended.	to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Golspie sewer catchment to improve knowledge and understanding of flood risk	Scottish Water	2016-20	The Scottish Water assessment of flood risk within the sewer catchment has not yet started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales
Maintain Flood Warning	G	SEPA will continue to maintain the 'Helmsdale to Embo' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Community Flood Action Groups	G	The Golspie Flood Prevention Group will work with THC to develop sustainable flooding solutions for Golspie.	THC	Ongoing	The Highland Council has engaged with local flood action groups in the development of the study.	Flood Action groups will be consulted on options as the scheme progresses in 2019.

Dornoch (Potentially Vulnerable Area 01/07)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Dornoch



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Summary of Progress for Dornoch

There are approximately 10 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £64,000. Further information can be found in LFRMP under PVA 01/07.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining 'Helmsdale to Embo' flood warning area

Overview of actions to manage flooding in Dornoch

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/07									G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Dornoch (PVA 01/07)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Maintain Flood Warning	G	SEPA will continue to maintain the 'Helmsdale to Embo' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the Scottish Flood Forecasting Service (SFFS) Partnership with the Met Office with daily, national flood guidance statements issued to Category 1 and 2 agencies (such as emergency responders, local authorities and other organisations with flooding management duties). Each daily statement gives an assessment of the risk of flooding for the next five days to help enable these organisations to put preparations in place to reduce the impact of flooding. SEPA's Flood Alert service is freely available to everyone and helps enable communities to be aware and prepared to reduce the impacts of flooding.	SEPA will continue and improve the Scottish Flood Forecasting Service (SFFS) with the Met Office, with daily flood guidance statements and flood alerts issued as required to enable communities and responders to reduce the impacts of flooding.

Tarbat Ness (Potentially Vulnerable Area 01/08)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Moray Coast



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Summary of Progress for Tarbat Ness

There are approximately 40 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £130,000. Further information can be found in LFRMP under PVA 01/08.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study planned for this cycle, has been postponed and is unlikely to commence due to funding constraints.
- Maintaining the 'Cromarty Firth, Portmahomack to Inver and Rockfield to Balintore flood warning areas.
- Modelling of the Balintore sewer catchment has commenced but is delayed.

Overview of actions to manage flooding in Tarbat Ness

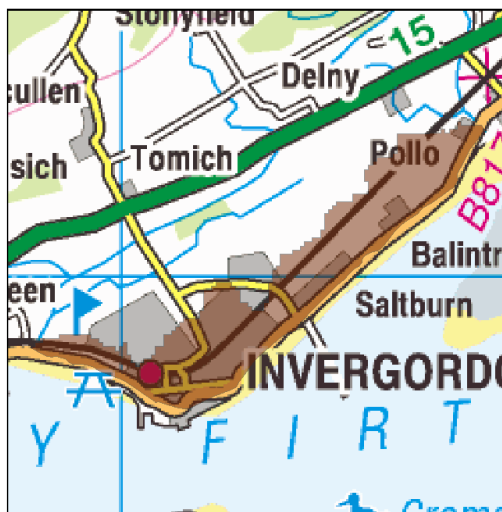
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/08				R			A		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Tarbet Ness (PVA 01/08)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	R	The Highland Council will undertake a Flood Protection Study to further investigate the feasibility of developing a Flood Protection Scheme (or Works) for Tarbat Ness.	THC	2018-21	Due to a reduction of funding to The Highland Council's Capital Programme (March 2018) this study will not be progressed in the first cycle (2016-2021).	Unless future reviews of the Capital Programme can allocate funds to this Flood Protection Study, it will not progress this cycle and will have to be prioritised against actions in cycle 2.
Strategic mapping and modelling	A	Scottish Water will undertake further investigation and modelling in the Balintore sewer catchment.	Scottish Water	2016-17	Started but delayed	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1
Maintain Flood Warning	G	SEPA will continue to maintain the Cromarty Firth, Portmahomack to Inver and Rockfield to Balintore flood warning areas.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service

Invergordon (Potentially Vulnerable Area 01/09)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Cromarty Firth



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Flood Risk Management Strategy, SEPA (December 2015).

Summary of Progress for Invergordon

There are approximately 10 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £6,000. Further information can be found in LFRMP under PVA 01/09.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Cromarty Firth flood warning area
- Modelling of the Invergordon sewer catchment has started but is delayed

Overview of actions to manage flooding in Invergordon

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/09							A		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Invergordon (PVA 01/09)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Maintain Flood Warning	G	SEPA will continue to maintain the Cromarty Firth flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Strategic mapping and modelling	A	Scottish Water will undertake further investigation and modelling in the Invergordon sewer catchment	Scottish Water	2016-20	Started but delayed	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1

Alness (Potentially Vulnerable Area 01/10)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Alness



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Summary of Progress for Alness

There are approximately 50 residential properties and 60 non-residential properties at risk of flooding. The Annual Average Damages are approximately £180,000. Further information can be found in LFRMP under PVA 01/10.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Improved modelling of the flood risk from the River Alness, Averon is complete
- Modelling of the Alness sewer catchment has started but is delayed
- Maintaining the Cromarty Firth flood warning area
- Developing a strategy for raising awareness and community resilience

Overview of actions to manage flooding in Alness

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/10							A		G	G			A	G	G	G	G	G

Summary of progress of actions to manage flood risk in the Alness (PVA 01/10)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	G	SEPA will review existing modelling and data for River Alness/Averon.	SEPA	2015-16	Action Complete. Revised flood modelling and mapping for the River Averon and Contullich Burn has been undertaken. Updated flood mapping for this area was published on the SEPA web site in April 2018.	Action complete. No further action required.
Strategic mapping and modelling	A	Scottish Water will undertake further investigation and modelling in the Alness sewer catchment.	Scottish Water	2016-18	Started but delayed.	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1
Maintain Flood Warning	G	SEPA will continue to maintain the 'Cromarty Firth' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Site Protection Plan	G	The Highland Council will work with a school and care home to build resilience in the event of a flood.	THC	2016-19	The SEPA flood maps have been updated and this now shows there to be reduction in flooding from the River Averon for the 1:200 year flood event. There is still a risk of flooding from the 1:1000 year event.	The Highland Council is developing a strategy for raising awareness and community resilience and plans to engage with the private nursing home to encourage consideration of a site protection plan.

Uig (Potentially Vulnerable Area 01/11)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Coast



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Summary of Progress for Uig

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £38,000. Further information can be found in LFRMP under PVA 01/11.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Uig

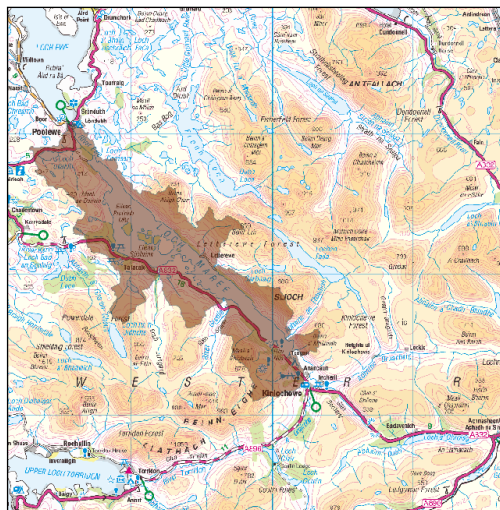
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/11										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Uig (PVA 01/11)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Poolewe (Potentially Vulnerable Area 01/12)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Loch Maree



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Summary of Progress for Poolewe

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £28,000. Further information can be found in LFRMP under PVA 01/12.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Poolewe

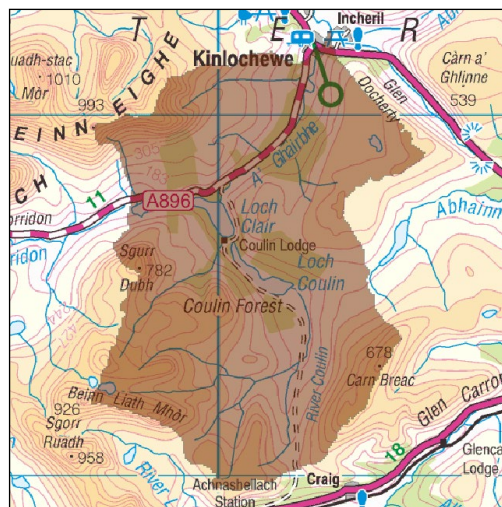
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/12										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Poolewe (PVA 01/12)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Kinlochewe (Potentially Vulnerable Area 01/13)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Coulin



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Summary of Progress for Kinlochewe

There are approximately 10 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £61,000. Further information can be found in LFRMP under PVA 01/13.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Kinlochewe

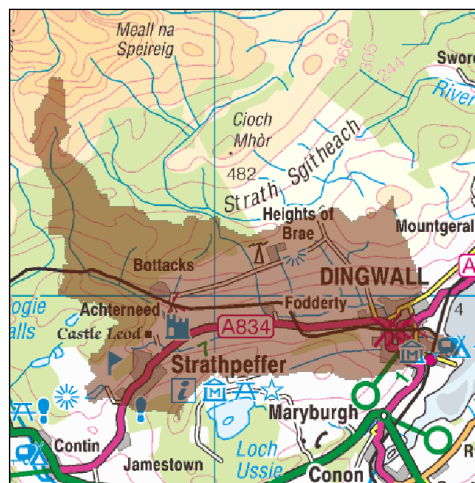
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/13										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Kinlochewe (PVA 01/13)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Dingwall & Strathpeffer (Potentially Vulnerable Area 01/14)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Peffery



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Summary of Progress for Dingwall & Strathpeffer

There are approximately 90 residential properties and 90 non-residential properties at risk of flooding. The Annual Average Damages are approximately £310,000. Further information can be found in LFRMP under PVA 01/14.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study, including detailed modelling of the fluvial and coastal flood risk is ongoing
- Commencement of a surface water management plan
- Maintaining existing flood defences
- Maintaining the Cromarty Firth flood warning area
- Modelling of the Dingwall & Strathpeffer sewer catchment has started but is delayed

Overview of actions to manage flooding in Dingwall & Strathpeffer

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/14				G		G	A	G	G	G			A	G	G		G	G

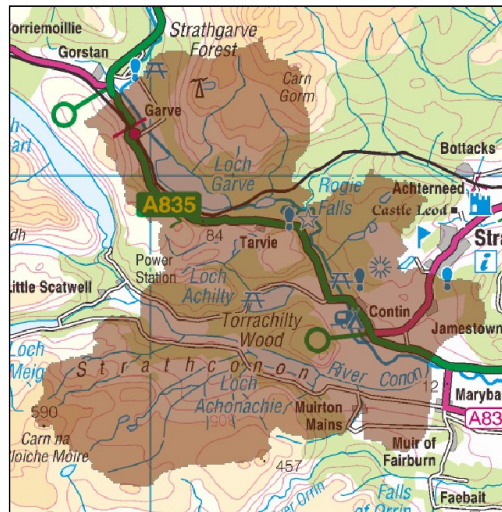
Summary of progress of actions to manage flood risk in the Dingwall & Strathpeffer (PVA 01/14)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	The Highland Council will undertake a Flood Protection Study to improve understanding of flood risk in Dingwall.	THC	2016-19	A Flood Protection Study to assess the fluvial and coastal flood risk in Dingwall is ongoing. A detailed hydraulic model has been built for the assessment of damages and potential options. A Public Exhibition as well as wider stakeholder engagement to discuss baseline flooding and potential options has been carried out.	Wider stakeholder engagement and a Public Exhibition are planned for early 2019. The study will progress the development of the preferred option following consultation.
Surface Water Management Plan	G	The Highland Council will develop a Highland-wide SWMP and identify actions to alleviate surface water flooding in Dingwall and Strathpeffer.	THC	2016-22	The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to progress this plan.	Further work is required to develop the plan. Aiming for the plan to be completed by 2022
Strategic Mapping and Modelling	A	Scottish Water will undertake further investigation and modelling in the Dingwall and	Scottish Water	2016-17	Started but delayed.	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1.

		Strathpeffer sewer catchments.				
Maintain Flood Protection Scheme	G	The Highland Council will maintain the existing Dingwall Flood Protection Scheme.	Ongoing	THC	The Highland Council inspects the Dingwall Flood Protection Scheme on an annual basis. A recent inspection of the defences identified areas where works were required to maintain the standard of the defences.	The Highland Council will continue to inspect the defences on an annual basis. Proposals are being developed for capital maintenance.
Maintain Flood Warning	G	SEPA will continue to maintain the 'Cromarty Firth' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service

Contin & Garve (Potentially Vulnerable Area 01/15)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Black Water



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Summary of Progress for Contin & Garve

There are approximately 30 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £59,000. Further information can be found in LFRMP under PVA 01/15.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Contin and Garve flood warning area
- Modelling of the Strathpeffer sewer catchment has been completed
- Developing a strategy for raising awareness and community resilience

Overview of actions to manage flooding in Contin & Garve

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/15	G						G		G	G			A	G	G		G	G

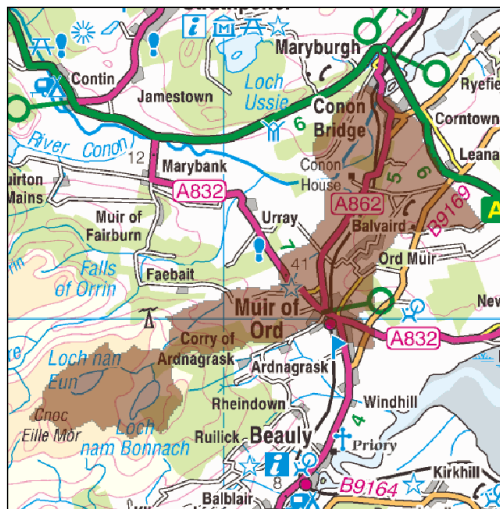
Summary of progress of actions to manage flood risk in the Contin & Garve (PVA 01/15)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	G	SEPA will incorporate additional surface water hazard mapping information into the flood maps.	SEPA	2018	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer consider appropriate to deliver this action as originally intended.	<p>This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2.</p> <p>Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.</p>
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Strathpeffer sewer	Scottish Water	2016-7	The Scottish Water assessment of flood risk within the sewer catchment has been completed. The assessment helps to improve knowledge and understanding of	Not applicable

		catchment			surface water flood risk	
Maintain Flood Warning	G	SEPA will continue to maintain: the 'Contin' and 'Garve' flood warning areas.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Site Protection Plan	G	The Highland Council will work with the management of a school, and provide advice in the development of a site protection plan, to reduce flood risk from the Black Water	THC	2016-19	The Highland Council working with SFF and SEPA have begun developing a strategy for encouraging community resilience across the Highlands.	The Highland Council will liaise directly with schools/ community assets to encourage and support a specific site protection/ flood resilience plan.
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A835.	Transport Scotland	2016-21	-	

Conon Bridge & Muir of Ord (Potentially Vulnerable Area 01/16)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Conon



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Summary of progress for Conon Bridge & Muir of Ord

There are approximately 60 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £250,000. Further information can be found in LFRMP under PVA 01/16.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a capital scheme to improve the standard of protection afforded by existing defences (see 'Other Actions', page 131)
- Maintaining existing flood defences
- Modelling of the Conon Bridge and Muir of Ord sewer catchments has been completed

Overview of actions to manage flooding in Conon Bridge & Muir of Ord

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/16							G	G		G			A	G	G		G	G

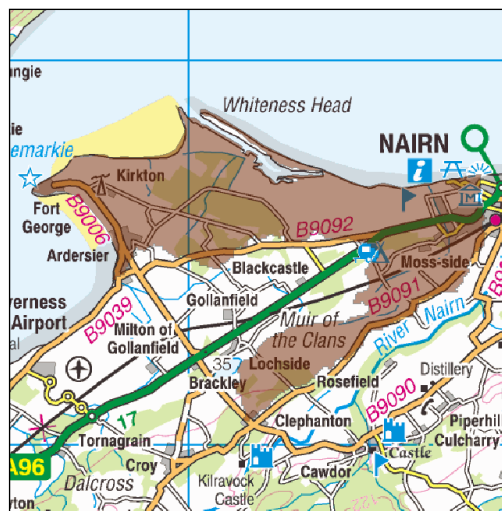
Summary of progress of actions to manage flood risk in the Conon Bridge & Muir of Ord (PVA 01/16)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	G	SEPA will incorporate additional surface water hazard mapping information into the flood maps to improve understanding of flood risk.	SEPA	2018-20	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer considered appropriate to deliver this action as originally intended.	<p>This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2.</p> <p>Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.</p>
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Conon Bridge and	Scottish Water	2016-19	The Scottish Water assessment of flood risk within the sewer catchment has been completed. The assessment helps to improve knowledge and understanding of	Not applicable

		Muir of Ord sewer catchments.			surface water flood risk	
Maintain Flood Protection Scheme	G	The Highland Council will maintain the River Conon Flood Protection Scheme in Conon Bridge.	THC	Ongoing	The Highland Council inspects the Conon Flood Defences on an annual basis.	The Highland Council has committed funds (along with developer contributions) to assess the potential to increase the standard of protection provided by the existing defences. The Highland Council will continue to inspect the defences on an annual basis.

Nairn West & Ardersier (Potentially Vulnerable Area 01/17)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Alton Burn



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Summary of Progress for Nairn West & Ardersier

There are approximately 30 residential properties and 30 non-residential properties at risk of flooding. The Annual Average Damages are approximately £73,000. Further information can be found in LFRMP under PVA 01/17.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Ardersier to Nairn flood warning area
- Modelling of the Ardersier and Nairn sewer catchments has been completed

Overview of actions to manage flooding in Nairn West & Ardersier

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/17							G		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Nairn West & Ardersier (PVA 01/17)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Ardersier and Nairn sewer catchments.	Scottish Water	2016-17 Ardersier; 2018-20 Nairn	The Scottish Water assessment of flood risk within the sewer catchment has been completed.	Not applicable
Maintain Flood Warning	G	SEPA will continue to maintain the 'Ardersier to Nairn' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service

Nairn Central (Potentially Vulnerable Area 01/18)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Nairn



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Summary of Progress for Nairn Central

There are approximately 350 residential properties and 30 non-residential properties at risk of flooding. The Annual Average Damages are approximately £340,000. Further information can be found in LFRMP under PVA 01/18.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Maintaining the Ardersier to Nairn flood warning area
- Development of the Nairn Flood Protection Study has been delayed due to funding pressures, but will be complete this cycle
- Modelling of the Nairn sewer catchment is complete

Overview of actions to manage flooding in Nairn Central

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/18				A			G		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Nairn (PVA 01/18)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	A	The Highland Council will undertake a Flood Protection Study to further investigate the feasibility of developing a Flood Protection Scheme (or Works) for central Nairn.	THC	2016-19	The Flood Protection Study for the River Nairn and coastal flood risk has not yet started due to uncertainty in the Capital Programme.	The Highland Council plans to tender the study within the current financial year. The Highland Council still aims to complete the study by 2022.
Strategic mapping and modelling	G	SEPA will incorporate additional surface water hazard mapping information into the flood maps.	SEPA	2018	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer considered appropriate to deliver this action as originally intended.	<p>This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2.</p> <p>Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that</p>

						we could consider it in the development of the 2021 FRM Strategies.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Ardersier and Nairn sewer catchments.	Scottish Water	2016-17 Ardersier; 2018-20 Nairn	The Scottish Water assessment of flood risk within the sewer catchment has been completed.	Not applicable
Maintain Flood Warning	G	SEPA will continue to maintain the 'Ardersier to Nairn' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service

Inverness Airport (Potentially Vulnerable Area 01/19)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	



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Summary of Progress for Inverness Airport

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £16,000. Further information can be found in LFRMP under PVA 01/19.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Modelling of the Ardersier sewer catchment is complete

Overview of actions to manage flooding in Inverness Airport

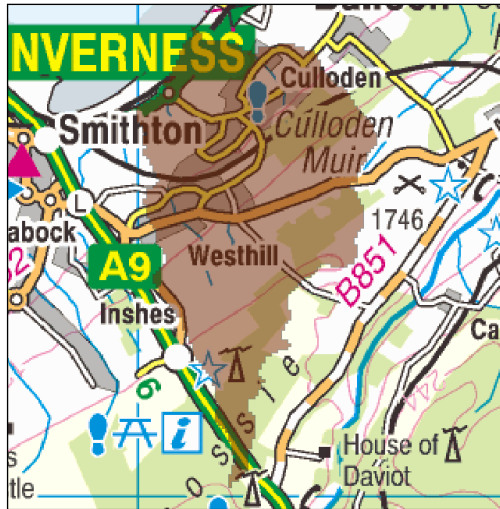
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/19							G			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Inverness Airport (PVA 01/19)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	G	SEPA will be seeking to incorporate additional surface water hazard mapping information into the flood maps.	SEPA	2018	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer considered appropriate to deliver this action as originally intended.	This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2. Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Ardersier sewer catchment.	Scottish Water	2016-17	The Scottish Water assessment of flood risk within the sewer catchment has been completed. The assessment helps to improve knowledge and understanding of surface water flood risk	

Smithton & Culloden (Potentially Vulnerable Area 01/20)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Smithton Burn/ Culloden Burn



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Summary of Progress for Smithton & Culloden

There are approximately 30 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £33,000. Further information can be found in LFRMP under PVA 01/20.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Completion of the detailed design and commencement of the Smithton & Culloden Flood Protection Scheme
- Commencement of a surface water management plan
- Progress on an Integrated Catchment Study

Overview of actions to manage flooding in Smithton & Culloden

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/20	G					G	G			G			A	G	G		G	G

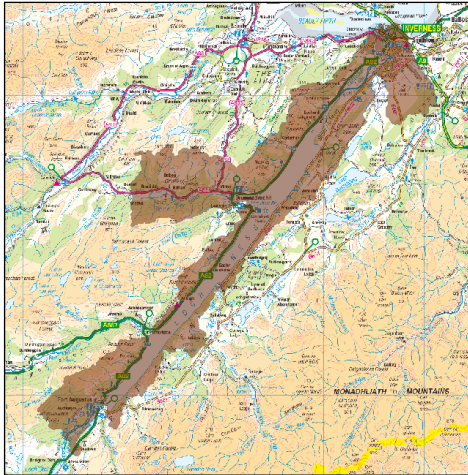
Summary of progress of actions to manage flood risk in the Smithton & Culloden (PVA 01/20)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme	G	The Highland Council has already implemented Phases 1-3 of the Smithton/Culloden Flood Protection Scheme which will be fully completed within the cycle.	THC	2016-20	The final phase of the Smithton & Culloden Flood Protection Scheme commenced construction in May 2018.	The scheme is expected to be complete by autumn 2019.
Surface Water Management Plan	G	The Highland Council will develop a Surface Water Management Plan to reduce the risk from surface water flooding in Smithton and Culloden.	THC	2016-22	<p>The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to progress this plan.</p> <p>The development of the Smithton and Culloden Surface Water Management Plan is linked to the development of the Integrated Catchment Study for Inverness, as the outputs of this study will be used to inform the development of the plan.</p>	Scottish Water to maintain their programme to complete the Inverness ICS with Highland Council input at relevant stages.

Surface Water Management Plan	G	Scottish Water will undertake an Integrated Catchment Study including Inverness and the wider catchment to inform surface water management planning.	Scottish Water	2016-20	The Integrated Catchment Study is on programme for completion this cycle.	-
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Highland PFI sewer catchment.	Scottish Water	2018-20	The Scottish Water assessment of flood risk within the sewer catchment has not yet started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales

Inverness & the Great Glen (Potentially Vulnerable Area 01/21)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Ness



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Summary of Progress for Inverness & the Great Glen

There are approximately 1400 residential properties and 380 non-residential properties at risk of flooding. The Annual Average Damages are approximately £5.6 million. Further information can be found in LFRMP under PVA 01/21.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a preferred Flood Protection Scheme for Drumadrochit
- Completion of a Natural Flood Management Study in Drumadrochit
- Maintenance of the River Ness and Fort Augustus Flood Alleviation Schemes and South West Flood Relief Channel
- Maintenance of the Inverness Harbour, City, Drumadrochit, The Riggs, Glen Urquhart, Ness-side flood warning areas
- Commencement of a Flood Protection Study for Mill Burn, Inverness
- Commencement of a Flood Protection Study for South Kessock is progressing through developer opportunities
- Commencement of a Flood Protection Study for the upper River Ness has been postponed and is not likely to progress this cycle due to funding constraints
- Commencement of a Surface Water Management Plan
- Commencement of an Integrated Catchment Study
- Modelling of the Highland PFI sewer catchment

Overview of actions to manage flooding in Inverness & the Great Glen

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/21	A			R	G	G	G	G	G	G		G	A	G	G		G	G

Summary of progress of actions to manage flood risk in the Inverness & the Great Glen (PVA 01/21)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme	G	The Highland Council will provide a flood protection scheme to reduce flood risk in Drumnadrochit and Kilmichael from the River Enrick.	THC	2016-22	The Highland Council has appointed consultants to develop the outline design for the scheme, which has now been completed.	The Highland Council plans to gain Committee approval in early 2019 after which formal consultation on the preferred option will commence. If the scheme is confirmed, detail design will start. Still aiming for construction to be completed by 2022.
Natural Flood Management Study	G	This Study will be carried out as part of the Flood Protection Scheme for the River Enrick	THC	2016-22	The Highland Council has appointed consultants to carry out a Natural Flood Management Study and to develop the outline design for a scheme, which has now been completed.	The Highland Council plans to gain Committee approval in early 2019 after which formal consultation on the preferred option will commence. If the scheme is confirmed, detail design will start. Still aiming for construction to be completed by 2022.

Community Flood Action Groups	G	The Glen Urquhart Land Use Partnership (GULUP) will work in partnership with any interested organizations with regard to flood risk from the River Enrick.	THC	Ongoing	The Highland Council working with SFF and SEPA have begun developing a strategy for encouraging community resilience across the Highlands.	The Highland Council will liaise directly with GULUP as necessary to encourage and support community resilience.
Flood Protection Scheme/ Works	A	The Highland Council will complete a Flood Protection Scheme providing protection to properties a risk from the Mill Burn in Inverness.	THC	2016-19	The Highland Council will progress a flood protection scheme for the Mill Burn in Inverness. The proposal includes 3 discrete operations: construction of flood embankments along Old Edinburgh Road, Castle Heather; flood walls alongside Diriebught Road and the replacement of a culvert beneath Harbour Road.	The Highland Council has appointed consultants to review and update previous study works to confirm the current preferred options. This work was delayed due to uncertainty in the Capital Programme.
Flood Protection Study	A	The Highland Council will carry out a Flood Protection Study to assess existing sea walls and defences in South Kessock, Inverness.	THC	2016-19	Despite a reduction of funding to The Highland Council's Capital Programme (March 2018) to fund this study it has commenced with developer funding.	Further consultation on options with the community and wider stakeholders is planned in 2019, in anticipation of a planning application being lodged in 2019.

Flood Protection Study	R	The Highland Council will carry out a Flood Protection Study to reduce flood risk in Inverness from the River Ness between Ness Bridge and Ness Islands.	THC	2018-21	Due to a reduction of funding to The Highland Council's Capital Programme (March 2018) this study will not be progressed in the first cycle (2016-2021).	Unless future reviews of the Capital Programme can allocate funds to this Flood Protection Study, it will not progress this cycle and will have to be prioritised against actions in cycle 2.
Surface Water Management Plan	G	The Highland Council will develop a Highland-wide Surface Water Management Plan (SWMP) to reduce risk from surface water flooding, with Inverness an area of focus.	THC	2016-22	<p>The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to progress this plan.</p> <p>The development of the Inverness Surface Water Management Plan is linked to the development of the Integrated Catchment Study for Inverness, as the outputs of this study will be used to inform the development of the plan.</p>	Scottish Water to maintain their programme to complete the Inverness ICS with Highland Council input at relevant stages.

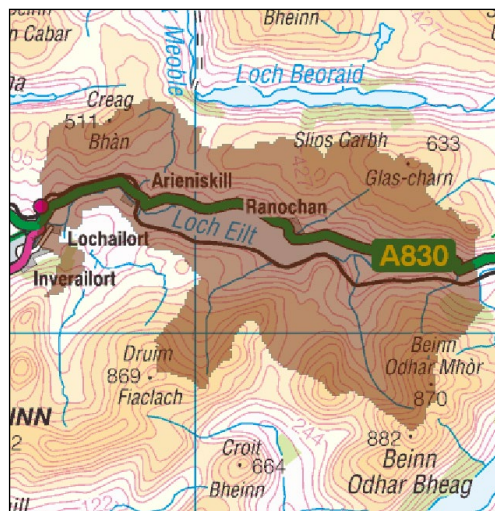
Surface Water Management Plan	G	An Integrated Catchment Study (ICS) including Inverness and the wider catchment will be carried out to support the surface water management planning process in Inverness, Smithton and Culloden.	Scottish Water	2016-20	Scottish Water has appointed consultants to work with The Highland Council to develop the ICS. Model build and verification is now complete with verification of predicted flooding planned for December 2018.	Identification of needs will follow in 2019.
Strategic mapping and modelling	G	Scottish Water will undertake further investigation and modelling in the Highland PFI sewer catchment.	Scottish Water	2018-20	The Scottish Water assessment of flood risk within the sewer catchment has not yet started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales
Strategic Mapping and Modelling	G	SEPA will be seeking to incorporate additional surface water hazard mapping information into the flood maps to improve understanding of	SEPA	2018	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across	This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in

		flood risk.			Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer consider appropriate to deliver this action as originally intended.	Cycle 2. Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.
Maintain Flood Protection Scheme	G	The Highland Council will maintain the River Ness Flood Alleviation Scheme (Tidal Section) and accept existing levels of flood risk in the north of Inverness due to flooding from the River Ness, downstream of Ness Bridge, and the Moray Firth	THC	Ongoing	The Highland Council inspects the River Ness (Tidal) defences on an annual basis. Community Services carry out annual training exercises for the operation of the scheme, in collaboration with SEPA's Flood Warning Scheme	The Highland Council will continue to inspect and maintain the defences on an annual basis.

Maintain Flood Protection Scheme	G	The Highland Council will maintain the South West Inverness Flood Protection Scheme and accept existing levels of flood risk to properties in the south west of Inverness from various rivers	THC	Ongoing	The Highland Council inspects the Inverness South West Flood Relief Channel on an annual basis. Community Services maintain the flood channel following recommendations	The Highland Council will continue to inspect and maintain the defences on an annual basis.
Maintain Flood Protection Scheme	G	The Highland Council will maintain the Fort Augustus Flood Protection Scheme and accept existing levels of flood risk in Fort Augustus.	THC	Ongoing	The Highland Council inspects the Fort Augustus Protection Scheme on an annual basis. A recent inspection of the defences identified areas where works will be required to maintain the defences.	The Highland Council will continue to inspect the defences on an annual basis.
Maintain Flood Warning	G	SEPA to continue to maintain the 'Drumnadrochit', 'Glen Urquhart', 'Invermoriston', 'Ness-side' and 'The Riggs, Fort Augustus' flood warning areas and provide warnings to low lying land,.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service

Lochailort (Potentially Vulnerable Area 01/22)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Loch Eilt



Summary of Progress for Lochailort

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £14,000. Further information can be found in LFRMP under PVA 01/22.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Lochailort

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/22	G									G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Lochailort (PVA 01/22)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A830.	Transport Scotland	2016-21	-	

Corpach (Potentially Vulnerable Area 01/23)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Loch Eil



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Summary of Progress for Corpach

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £94,000. Further information can be found in LFRMP under PVA 01/23.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Commencement of a surface water management plan
- Maintaining the Corpach and Caol flood warning area
- Commencement of Corpach sewer catchment modelling

Overview of actions to manage flooding in Corpach

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/23	G					G	G			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Corpach (PVA 01/23)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Surface Water Management Plan	G	The Highland Council will develop a Highland-wide Surface Water Management Plan which will include measures to reduce surface water flood risk in Corpach.	THC	2016-22	The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to progress this plan.	Further work is required to develop the plan. Aiming for the plan to completed by 2022
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A830.	Transport Scotland	2016-21	-	
Maintain Flood Warning	G	SEPA will continue to maintain the 'Corpach and Caol' coastal flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service.	SEPA will continue to operate the flood warning service
Strategic Mapping and Modelling	G	Scottish Water will undertake further investigation and modelling in the Corpach sewer catchments to reduce overall flood risk.	Scottish Water	2018-20	The Scottish Water assessment of flood risk within the sewer catchment has started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales

Caol & Inverlochy (Potentially Vulnerable Area 01/24)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Lochy



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Summary of Progress for Caol & Inverlochy

There are approximately 170 residential properties and 40 non-residential properties at risk of flooding. The Annual Average Damages are approximately £250,000. Further information can be found in LFRMP under PVA 01/24.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Confirmation of the Caol Flood Protection Scheme and completion of the detailed design stage
- Modelling of the Fort William and Corpach sewer catchments
- Commencement of the Caol and Inverlochy surface water management plan
- Maintaining the Corpach and Caol flood warning area

Overview of actions to manage flooding in Caol & Inverlochy

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/24	A					G	G		G	G			A	G	G		G	G

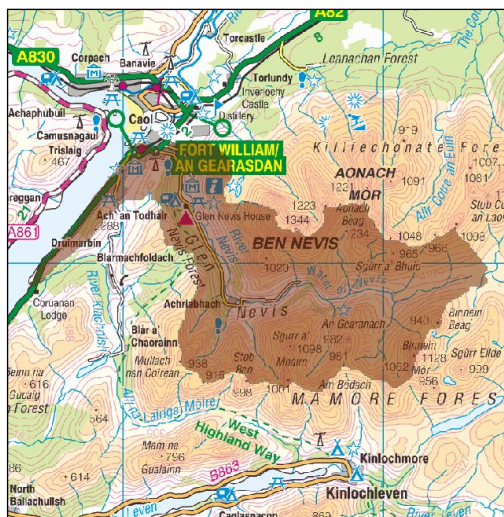
Summary of progress of actions to manage flood risk in the Caol & Inverlochty (PVA 01/24)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme	A	The Caol Flood Protection Scheme, providing protection to properties a risk of flooding from Loch Linnhe and the River Lochy, will be completed within the cycle.	THC	2016-20	Formal consultation for the scheme has concluded. The Highland Council has made a preliminary decision to make the scheme and Scottish Ministers have decided not to call this decision in.	Once a hearing has taken place, a final decision will be made (2019). Still aiming for completion of scheme by 2022.
Maintain Flood Warning	G	SEPA will continue to maintain the 'Corpach and Caol' coastal flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Surface Water Management Plan	G	The Highland Council will develop a Highland-wide Surface Water Management Plan which will include measures to reduce surface water flood risk in Caol and Inverlochty.	THC	2016-22	The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to progress this plan.	Further work is required to develop the plan. Aiming for the plan to completed by 2022

Strategic Mapping and Modelling	G	Scottish Water will undertake further investigation and modelling in the Corpach and Fort William sewer catchments to reduce overall flood risk.	Scottish Water	2016-20	The Scottish Water assessment of flood risk within the sewer catchment has started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales
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Fort William (Potentially Vulnerable Area 01/25)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Nevis



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Summary of Progress for Fort William

There are approximately 100 residential properties and 80 non-residential properties at risk of flooding. The Annual Average Damages are approximately £520,000. Further information can be found in LFRMP under PVA 01/25.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study for Fort William has been postponed and is unlikely to commence this cycle as planned, due to funding constraints
- Commencement of a surface water management plan
- Modelling of the Fort William sewer catchment
- Maintaining the Fort William flood warning area

Overview of actions to manage flooding in Fort William

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/25	G			R		G	G		G	G			A	G	G		G	G

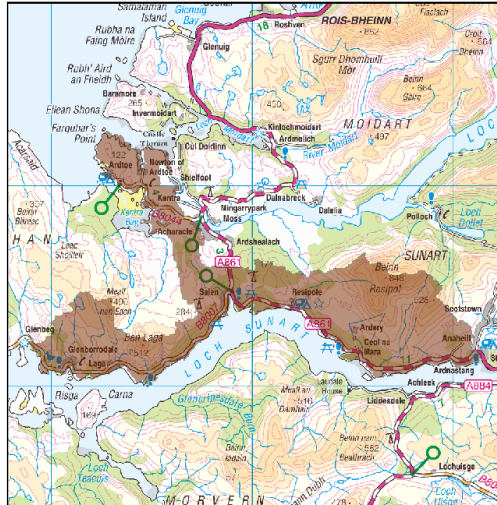
Summary of progress of actions to manage flood risk in the Fort William (PVA 01/25)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	R	The Highland Council will undertake a Flood Protection Study into the feasibility of developing a Flood Protection Scheme to reduce flood risk in Fort William from Loch Linnhe.	THC	2016-19	Due to a reduction of funding to The Highland Council's Capital Programme (March 2018) this study will not be progressed in the first cycle (2016-2021).	Unless future reviews of the Capital Programme can allocate funds to this Flood Protection Study, it will not progress this cycle and will have to be prioritised against actions in cycle 2.
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A82	Transport Scotland	2016-2021	-	
Maintain Flood Warning	G	SEPA will continue to maintain the Fort William' flood warning area	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service
Surface Water Management Plan	G	The Highland Council will develop a Highland-wide Surface Water Management Plan	THC		The Highland Council has started work on developing a Highland wide Surface Water Management Plan. Initial meetings have been held with Scottish Water to	Further work is required to develop the plan. Aiming for the plan to completed by 2022

		which will identify measures to reduce surface water flooding in Fort William.			progress this plan.	
Strategic Mapping and Modelling	G	Scottish Water will undertake further investigation and modelling in the Fort William sewer catchment to reduce overall flood risk.	Scottish Water	2016-20	-	

Sunart & Moidart (Potentially Vulnerable Area 01/26)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Thurso



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Summary of Progress for Sunart & Moidart

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £69,000. Further information can be found in LFRMP under PVA 01/26.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Sunart & Moidart

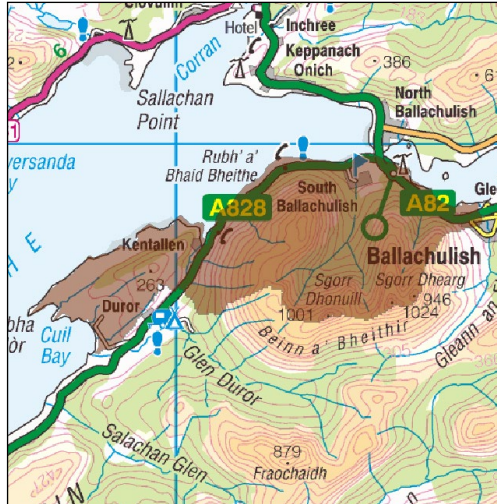
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/26										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Sunart & Moidart (PVA 01/26)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

South Ballachulish (Potentially Vulnerable Area 01/27)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Loch Linnhe



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Summary of Progress for South Ballachulish

There are approximately 20 residential properties and 40 non-residential properties at risk of flooding. The Annual Average Damages are approximately £130,000. Further information can be found in LFRMP under PVA 01/28.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in South Ballachulish

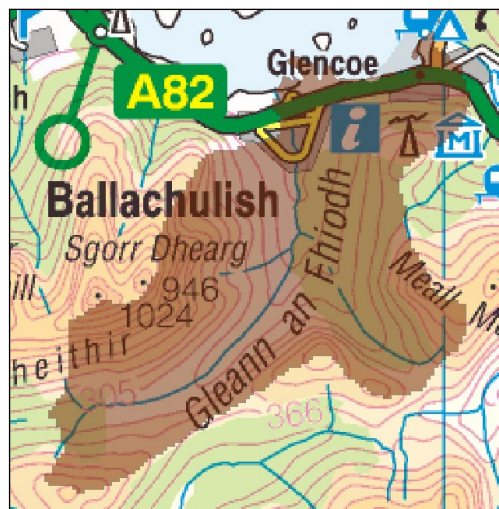
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/27										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the South Ballachulish (PVA 01/27)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Ballachulish & Glencoe (Potentially Vulnerable Area 01/28)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	Loch Leven



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Summary of Progress for Ballachulish & Glencoe

There are approximately 50 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £180,000. Further information can be found in LFRMP under PVA 01/28.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Ballachulish & Glencoe

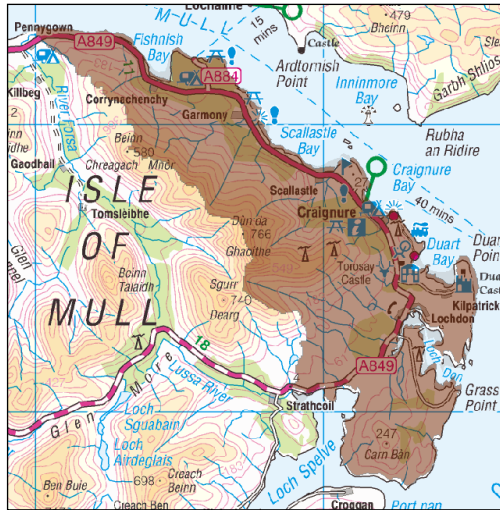
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/28	G									G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Ballachulish & Glencoe (PVA 01/28)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A82.	Transport Scotland	2016-21	-	

Isle of Mull (Potentially Vulnerable Area 01/29)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Sound of Mull



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Summary of Progress for Isle of Mull

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £69,000. Further information can be found in LFRMP under PVA 01/29.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Isle of Mull

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/29										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Isle of Mull (PVA 01/29)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Ross of Mull (Potentially Vulnerable Area 01/30)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Firth of Lorn



Summary of Progress for Ross of Mull

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £110,000. Further information can be found in LFRMP under PVA 01/30.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

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Overview of actions to manage flooding in Ross of Mull

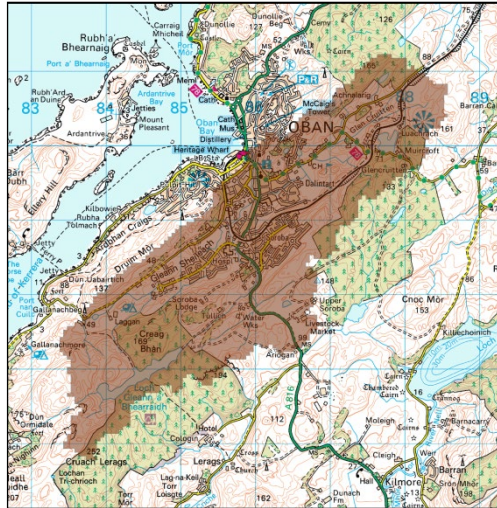
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/30										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Ross of Mull (PVA 01/30)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Oban (Potentially Vulnerable Area 01/31)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Black Lynn Burn



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Summary of Progress for Oban

There are approximately 320 residential properties and 310 non-residential properties at risk of flooding. The Annual Average Damages are approximately £1.8 million. Further information can be found in LFRMP under PVA 01/31.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study including detailed modelling of the fluvial and coastal flood risk is ongoing
- Maintaining the Oban flood warning area
- Modelling of the Oban sewer catchment is complete
- Commencement of a surface water management plan

Overview of actions to manage flooding in Oban

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/31				G		G	G		G	G			A	G	G		G	G

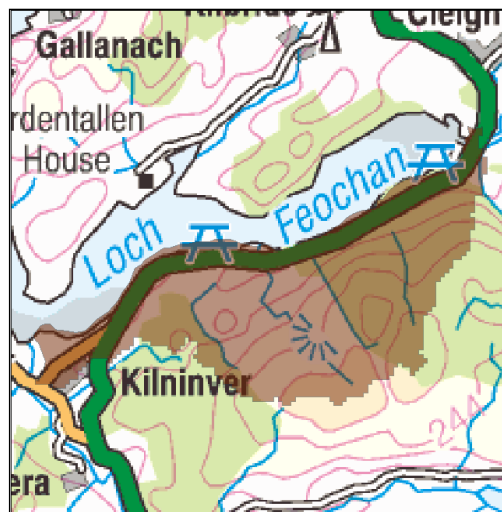
Summary of progress of actions to manage flood risk in the Oban (PVA 01/31)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	Argyll & Bute Council will undertake a study to assess flood risk from the Black Lynn Burn and coastal flooding in Oban Bay.	ABC	2016-21	<p>The Oban flood study commenced in May 2018 and is being progressed by Envirocentre. The Section 16 assessment by Scottish Water has been provided for inclusion in the study.</p> <p>As of August 2018 the initial public consultation and gap analysis has been completed and additional data sourcing to support baseline modelling commenced.</p>	Internal programme deadline of June 2019 for completion of the study.
Surface Water Management Plan	G	Argyll and Bute Council will produce a surface water management plan or plans, which set objectives for the management of surface water flood risk.	ABC	2016-19	<p>The Oban SWMP commenced in May 2018 and is being progressed by Envirocentre. Section 16 data from Scottish Water is expected to be available for inclusion in the SWMP.</p> <p>As of August 2018 the initial public consultation and gap analysis has been completed and additional data sourcing to</p>	Internal programme deadline of January 2019 for completion of the SWMP.

					support baseline modelling commenced.	
Maintain Flood Warning	G	SEPA will continue to maintain the 'Oban' coastal flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service.
Strategic Mapping and Modelling	G	Scottish Water will undertake further investigation and modelling in the Oban sewer catchments	Scottish Water	2017-20	The Scottish Water assessment of flood risk within the sewer catchment has been completed. The assessment helps to improve knowledge and understanding of surface water flood risk.	Not Applicable.

Loch Feochan (Potentially Vulnerable Area 01/32)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Loch Feochan



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Summary of Progress for Loch Feochan

There are approximately 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £19,000. Further information can be found in LFRMP under PVA 01/32.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Loch Feochan

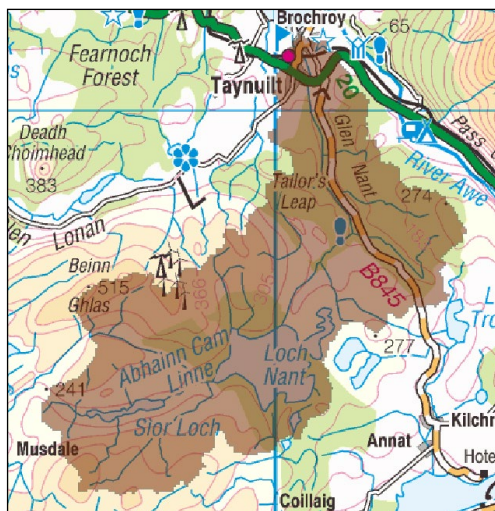
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/32										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Loch Feochan (PVA 01/32)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Taynuilt (Potentially Vulnerable Area 01/33)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	River Nant/ Loch Etive



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Summary of Progress for Taynuilt

There are approximately 40 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £130,000. Further information can be found in LFRMP under PVA 01/33.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Modelling of the Taynuilt sewer catchment has started but is delayed
- Improved modelling of the flood risk from the River Nant has started

Overview of actions to manage flooding in Taynuilt

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/33	G						A			G			A	G	G		G	G

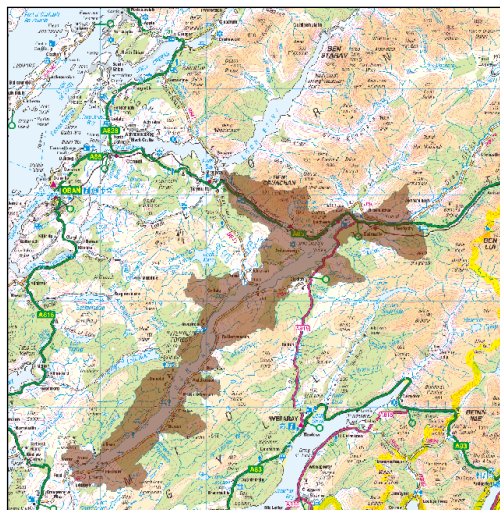
Summary of progress of actions to manage flood risk in the Taynuilt (PVA 01/33)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Strategic mapping and modelling	A	Scottish Water will undertake further investigation and modelling in the Taynuilt sewer catchment to reduce overall flood risk.	Scottish Water	2016-17	The Scottish Water assessment of flood risk within these sewer catchments has been delayed. The assessment will improve knowledge and understanding of surface water flood risk.	Assessment will not deliver within LFRMP timescales but is still on track to deliver within FRM Cycle 1
Strategic mapping and modelling	G	SEPA will review existing coastal and river modelling and data in this area, to determine if any improvements can be made to the coastal and river flood maps.	SEPA	River: 2016 Coastal: 2016-19	River: Following a screening exercise to characterise the catchment, a project to improve the representation of river flood hazard for the River Nant has been undertaken on the basis of the available information. Whilst updated river flood hazard mapping for this area was published on the SEPA web site in April 2018, there remains scope for further updates if information subsequently becomes available on the upstream hydroelectric scheme. Coastal: A project to update design extreme sea levels around	River: Action partially complete. Any further revisions to the river flood hazard maps for this area are dependent on the availability of data on the Nant hydro scheme. Coastal: It is intended to complete the action in relation to the coastal flood hazard maps by the end of 2018.

					the UK is currently underway. Once data is available from this project, it will be possible to review the existing coastal flood hazard maps for the Loch Etive area including Taynuilt and assess the requirement for any revisions.	
Flood Protection Scheme/Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A85.	Transport Scotland	2016-21	-	

Loch Awe (Potentially Vulnerable Area 01/34)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	River Awe/ Orchy



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Summary of Progress for Loch Awe

There are approximately 20 residential properties and 30 non-residential properties at risk of flooding. The Annual Average Damages are approximately £100,000. Further information can be found in LFRMP under PVA 01/34.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Loch Awe

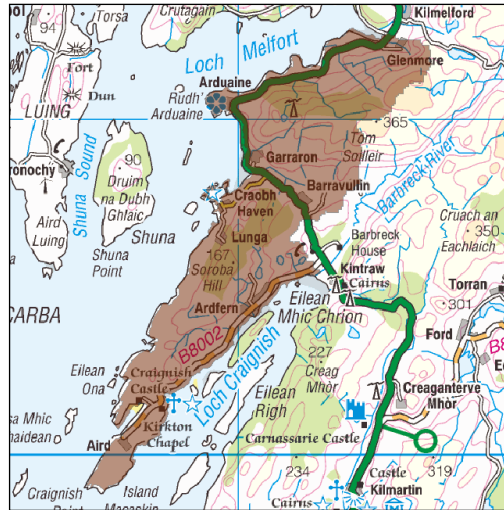
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/34	G						G			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Loch Awe (PVA 01/34)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A85.	Transport Scotland	2016-19	-	
Strategic mapping and modelling	G	SEPA to incorporate additional surface water hazard mapping information into the flood maps to improve understanding of flood risk.	SEPA	2018	SEPA's current Surface water hazard maps use design rainfall estimates based on FEH99 methodology, this has now been superseded by FEH13 methodology. The FEH13 dataset contains the latest science and understanding of rainfall across Scotland and represents a significant change in rainfall amounts compared to FEH99 dataset, as such it is no longer consider appropriate to deliver this action as originally intended.	This action will not be taken forwards as described. SEPA will develop new Surface water flood hazard maps over the remainder of Cycle 1. It is anticipated that updated flood mapping from this revised action will be available early in Cycle 2. Alongside this SEPA will investigate the feasibility of developing an interim approach to assess the change in Surface water hazard (and risk) associated with FEH13, such that we could consider it in the development of the 2021 FRM Strategies.

Craignish (Potentially Vulnerable Area 01/35)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Loch Melfort



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Summary of Progress for Craignish

There are fewer than 10 residential and approximately 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £93,000. Further information can be found in LFRMP under PVA 01/35.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Craignish

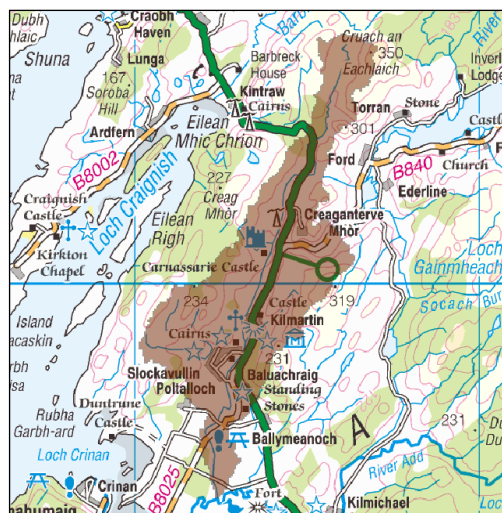
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/35										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Craignish (PVA 01/35)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Kilmartin (Potentially Vulnerable Area 01/36)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Kilmartin Burn



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Summary of Progress for Kilmartin

There are fewer than 10 residential and non-residential properties at risk of flooding. The Annual Average Damages are approximately £49,000. Further information can be found in LFRMP under PVA 01/36.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

Overview of actions to manage flooding in Kilmartin

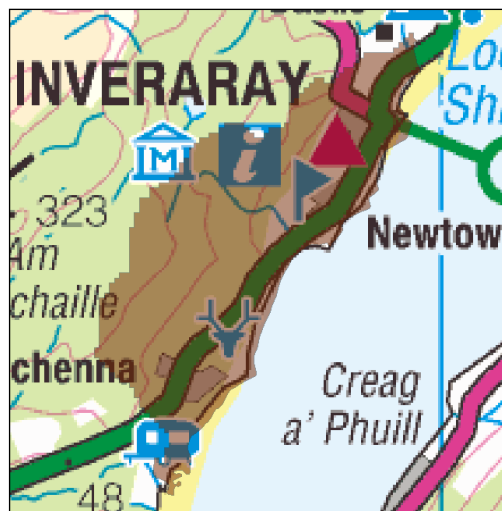
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/36										G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Kilmartin (PVA 01/36)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
No PVA specific actions planned this cycle						

Inveraray (Potentially Vulnerable Area 01/37)

Local Plan District	Local authority	Main catchment
Highland & Argyll	The Highland Council	River Aray



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Summary of Progress for Inveraray

There are approximately 40 residential properties and 50 non-residential properties at risk of flooding. The Annual Average Damages are approximately £390,000. Further information can be found in LFRMP under PVA 01/37.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Improvements to coastal flood mapping is ongoing

Overview of actions to manage flooding in Inveraray

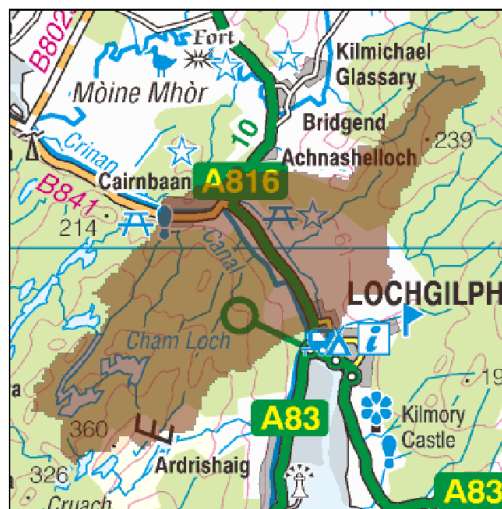
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/37	G						G			G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Inveraray (PVA 01/37)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme/ Works	G	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A83.	Transport Scotland	2016-21	-	
Strategic mapping and modelling	G	SEPA will review existing modelling for this area in partnership with Argyll and Bute Council to determine if any improvements can be made to the coastal flood maps.	SEPA	2016-19	A topographic survey has been undertaken through Inveraray to support a review of the existing coastal flood hazard maps. Review of the new collected topographic data has indicated a requirement to revise the flood mapping at this location.	It is intended to complete this action by the end of 2018. The requirement for any further hazard map improvements to Inveraray will be assessed as part of the requirements scoping for coastal hazard mapping improvements within the wider Firth of Clyde area. Any further work identified would likely take place in Cycle 2.

Lochgilphead (Potentially Vulnerable Area 01/38)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Badden Burn/ Crinan Canal



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Summary of Progress for Lochgilphead

There are approximately 20 residential properties and 10 non-residential properties at risk of flooding. The Annual Average Damages are approximately £69,000. Further information can be found in LFRMP under PVA 01/38.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study for Lochgilphead including detailed modelling of the fluvial and coastal flood risk is ongoing
- Maintaining the Lochgilphead A83 flood warning area

Overview of actions to manage flooding in Lochgilphead

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/38				G			G		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Lochgilphead (PVA 01/38)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	Argyll & Bute Council will undertake a hydraulic study to improve understanding of river and coastal flood risk in Lochgilphead.	A&BC	2016-21	The Lochgilphead flood study commenced in May 2018 and is being progressed by AECOM. As of August 2018 the initial public consultation and gap analysis has been completed ahead of baseline modelling.	Internal programme deadline of June 2019 for completion of the study.
Strategic mapping and modelling	G	Scottish Water Further investigation and modelling in the Lochgilphead sewer catchment.	Scottish Water	2016-20	The Scottish Water assessment of flood risk within the sewer catchment has not yet started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales.
Maintain Flood Warning	G	SEPA will continue to maintain the 'Lochgilphead A83' flood warning area to reduce overall flood risk.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service.

Tarbert (Potentially Vulnerable Area 01/39)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Loch Fyne



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Summary of Progress for Tarbert

There are approximately 10 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £110,000. Further information can be found in LFRMP under PVA 01/39.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Study assessing the coastal flood risk is ongoing
- Maintaining the Tarbert Harbour flood warning area
- Modelling of the Tarbert sewer catchment is complete

Overview of actions to manage flooding in Tarbert

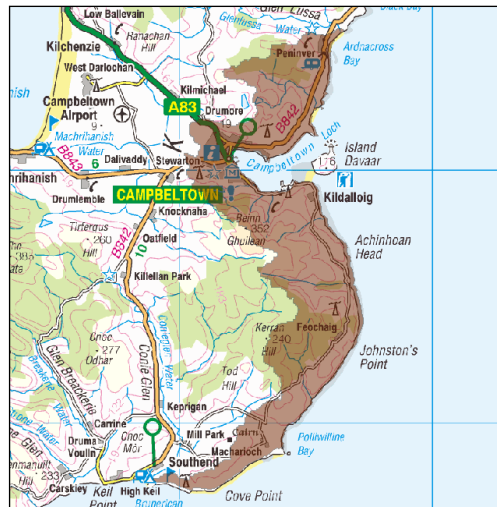
PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/39				G			G		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Tarbert (PVA 01/39)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Study	G	Argyll & Bute Council will undertake a study to further investigate the feasibility of a Flood Protection Scheme for coastal flooding in Tarbert	ABC	2016-21	The Tarbert coastal flood study commenced in May 2018 and is being progressed by AECOM. As of August 2018 the initial public consultation and gap analysis has been completed ahead of baseline modelling.	Internal programme deadline of June 2019 for completion of the study.
Maintain Flood Warning	G	Continue to maintain the 'Tarbert Harbour' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service	SEPA will continue to operate the flood warning service.
Strategic Mappings and Modelling		Scottish Water will undertake further investigation and modelling in the Tarbert sewer catchment to reduce overall flood risk.	Scottish Water	2016-17	The Scottish Water assessment of flood risk within the sewer catchment has been completed. The assessment helps to improve knowledge and understanding of surface water flood risk.	Not Applicable.

Campbeltown (Potentially Vulnerable Area 01/40)

Local Plan District	Local authority	Main catchment
Highland & Argyll	Argyll & Bute Council	Firth of Clyde, Millknowe, Balegreggan and Witchburn burns.



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Summary of Progress for Campbeltown

There are approximately 360 residential properties and 350 non-residential properties at risk of flooding. The Annual Average Damages are approximately £550,000. Further information can be found in LFRMP under PVA 01/40.

https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01

- Development of a Flood Protection Scheme including detailed modelling of the fluvial flood risk is ongoing toward promotion of a Flood Order through the FRM Act in Cycle 1 in 2019.
- Modelling of the Campbeltown sewer catchment is ongoing
- Maintaining the Campbeltown Hall Street and Esplanade flood warning area
- Development of the surface water management plan has started after some delays during 2018

Overview of actions to manage flooding in Campbeltown

PVA	Flood protections scheme/works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
01/40	G					G	G		G	G			A	G	G		G	G

Summary of progress of actions to manage flood risk in the Campbeltown (PVA 01/40)

Action	Status (R-A-G)	Description	Delivery Lead	Planned Dates	Interim progress	Planned actions to complete
Flood Protection Scheme/ Works	G	A Flood Protection Scheme is to be developed for Campbeltown to reduce flood risk from small watercourses.	ABC	2016-21	<p>The Campbeltown scheme has progressed to modelling of a short list of options ahead of final recommendations on scheme solutions(s) for local authority approval by late 2018. Solutions relate primarily to upstream catchment controls/storage and improved conveyancing of fluvial flows</p> <p>The Scottish Water S16 model completion has been delayed and is now expected to be available for urban catchment and solutions assessment early 2019. Delays have affected the project programme, but SWM planning works are progressing based on the information available.</p>	<p>Proposed solutions public consultation - October 18</p> <p>Local Authority approvals for upstream catchment solutions - Dec 18</p> <p>Deemed planning - September 19</p> <p>Construction - from Aug 20</p>

					In the interim period wider catchment solutions are being investigated and may be promoted separately as a flood order.	
Maintain Flood Warning	G	SEPA to continue to maintain the 'Campbeltown Hall Street and Esplanade' flood warning area.	SEPA	Ongoing	SEPA has continued to operate the flood warning service.	SEPA will continue to operate the flood warning service.
Surface Water Management Plan	G	Argyll & Bute Council to produce Surface Water Management Plan to reduce surface water flood risk in Campbeltown.	ABC	2016-19	The Scottish Water S16 model is expected to be available to update the urban catchment assessment for the SWMP early 2019. Delays have affected the project programme, but SWM planning works are progressing based on the information available.	Anticipated SWMP completion - June 19
Strategic Mapping and Modelling	G	Scottish Water will undertake further investigation and modelling in the Campbeltown sewer catchment	Scottish Water	2016-19	The Scottish Water assessment of flood risk within the sewer catchment has started. The assessment will improve knowledge and understanding of surface water flood risk.	On track to deliver within agreed LFRMP timescales

Other actions

This section sets out details of additional significant actions undertaken in the LPD by local authorities to contribute to the implementation of the current actions in the plan and the achievement of the objectives in the plan.

Conon Bridge Flood Defence Improvements

The Highland Council has taken advance of developer contributions in PVA 01/16 to develop improvements to the standard of protection provided by the historic defences along the River Conon. The feasibility of the proposed improvements has been accepted and a planning application lodged. If all necessary permissions are granted, the proposed works may take place this cycle.

Kirkhill Watercourse Diversion Scheme

The Highland Council constructed a diversion of a culverted section of the Kirkhill Burn in 2016/17 to alleviate flooding in Kirkhill due to a restriction on the culverted watercourse.

Clachan Flood Study

Argyll and Bute Council are progressing a flood study in the Clachan catchment, south of Tarbert, due to a series of significant flooding events in recent years. Clachan is not currently classified as a PVA, but is nominated as part of the NFRA2 process. Based on the study outcomes Argyll and Bute Council may seek to promote a scheme during Cycle 2.

Halkirk Surface Water Management Plan

The Highland Council has started work on developing a Highland wide Surface Water Management Plan (SWMP). Halkirk (not previously identified within a PVA) was identified in the 1st cycle as being a priority area for inclusion within the SWMP. Initial meetings, including the assessment and agreement of hotspot areas, have been held with Scottish Water to progress this plan.

List of Acronyms and Abbreviations

ABC	Argyll & Bute Council
FRM	Flood Risk Management
ICS	Integrated Catchment Study
LFRMP	Local Flood Risk Management Plan
LPD	Local Plan District
NFM	Natural Flood Management
PVA	Potentially Vulnerable Area
Q&S	Quality & Standards (Scottish Water)
SEPA	Scottish Environment Protection Agency
SFF	Scottish Flood Forum
SR10/15	Spending Review periods for 2010-2015 and 2016-2021 for Scottish Water capital maintenance expenditure
SWMP	Surface Water Management Planning
THC	The Highland Council

Appendix 1:

Flood risk management responsibilities in Scotland and the legal requirement
for the publication of this INTERIM REPORT

Flood risk management in Scotland

The Scottish Ministers, SEPA and responsible authorities must exercise their flood risk related functions with a view to reducing overall flood risk (reference Section 1(1) of the Flood Risk Management (Scotland) Act 2009).

Through the preparation of a national flood risk assessment and setting of objectives to reduce the level of flood risk by SEPA, which is published in Flood Risk Management Strategy, and the publication of Local Flood Risk Management Plan's by 'lead' local authorities, which detail how and when the actions agreed to meet these objectives are to be done, SEPA and all responsible authorities must act to manage flood risk in a sustainable way.

Legal requirement

This document sets out the conclusions of the review of the Local Flood Risk Management Plan (LFRMP) for the Highland & Argyll Local Plan District (LPD) as required by Section 37 of the Flood Risk Management (Scotland) Act 2009 (the "Act").

37 Local flood risk management plans: interim report

(1) Not earlier than 2 years and not later than 3 years after a local flood risk management plan is finalised, the lead authority must —

(a) review the plan, and

(b) publish a report on the conclusions of the review including information on the progress that has been made towards implementing the measures identified in the implementation part of the plan.

(2) The lead authority must make copies of the report available for public inspection.

The Highland & Argyll LFRMP, which includes the 'implementation part of the plan', was published in June 2016. The Interim Report is therefore to be published between July 2018 and June 2019. The Interim Report will provide a summary of the LFRMP actions ('measures') and the proposed delivery timescales.

The information on progress will include:

- an assessment of the progress towards implementing each of the actions;
- reasons for any actions where delivery is not as planned; and
- a description of arrangements planned to deliver the remaining actions and to address delayed actions.

The Interim Report is published by the 'lead authority' as defined by Section 34(9) of the Act in partnership with SEPA and the 'responsible authorities', as defined by Section 5 of the Act, will be in the LPD. The approval of the Interim Report will be in accordance with the agreed governance arrangements in the LPD. The responsible authorities for the HIGHLAND & ARGYLL LPD are:

- The Highland Council (lead authority)
- Argyll & Bute Council
- Cairngorms National Park
- Loch Lomond and Trossachs National Park Authority
- Scottish Environment Protection Agency
- Forestry Commission Scotland
- Scottish Water.

The lead authority must also publish a Final Report on the LFRMP under Section 38 of the Act between July 2021 and June 2022 (not earlier than 5 years and not later than 6 years from the publication of the plan). The Final Report will provide an assessment of current actions and a summary of current actions not implemented, with reasons for their non-implementation. The Final Report will also include a description of any other measures implemented, which the lead authority considers have contributed to the achievement of the objectives summarised in the LFRMP.

Publication

The published Interim Report for the HIGHLAND & ARGYLL LFRMP will be made available for public inspection, as per Section 37(2) of the Act, via the website of the lead authority, The Highland Council:

www.TheHighland.gov.uk; search for "Interim Report LFRMP".

Links to the published Interim Report for the HIGHLAND & ARGYLL LFRMP will also be provided from Scottish Government, SEPA and other responsible authority websites.

A hard (paper) copy of the published Interim Report for the HIGHLAND & ARGYLL LFRMP is also available for public inspection on weekdays between 9am and 5pm at the following location(s):

The Highland Council, Council Offices, High Street, Dingwall, Ross-shire, IV15 9QN

Copies of the published Interim Report for the HIGHLAND & ARGYLL LFRMP may also be available at offices of other responsible authorities. It is advised that the responsible authority be contacted to make such arrangements.

Detailed arrangements for publication of the Interim Report for HIGHLAND & ARGYLL LFRMP are in Appendix 2.

Appendix 2:
Publication details

Flood Risk Management (Scotland) Act 2009

Publication of Interim Report for the Highland & Argyll Local Flood Risk Management Plan –

Summary of Proposed Communications Activities

The following communications activities will be used to publicise and make the interim report available:

- Upon finalising the Interim Report for the Highland & Argyll LFRMP, Sections 37(2), 53 and 54 of the Flood Act also specifically require The Highland Council, as the lead authority, to
 - Publish an Interim Report on the Highland & Argyll LFRMP;
 - Make copies of the Interim Report available for public inspection free of charge and at all reasonable times;
- The Interim Report for the Highland & Argyll LFRMP will be published in a hard copy format and a pdf version will also be made available on the Council's website at
https://www.highland.gov.uk/downloads/file/16173/the_draft_highland_7_argyll_local_flood_risk_management_plan_lpd01
- Hard copies of the Interim Report for the Highland & Argyll LFRMP will be held and made available upon request within the Council's Dingwall Area office, where the Flood Risk Management Team can explain aspects of progress if needed
- A letter (with a pdf version on DVD) will be sent to SEPA and the Scottish Ministers.
- Community councils will be emailed advising them on the publication of the Interim Report.
- Announcements will be posted on social media (the Highland Council Facebook and Twitter pages).

SEPA, National Park Authorities, Forestry Commission Scotland and Scottish Water are also invited to advertise the publication of the Interim Report on their websites and via social media.

