2.4.4 Kinross, Milnathort And Glenrothes (02/10/03)

Kinross, Milnathort and Glenrothes have been designated as a potentially vulnerable area due to the various risks of flooding, within these areas. Surface water pluvial flooding is the most prevalent flooding facing Glenrothes and Markinch, whilst fluvial flooding from the Lochty Burn is the most prevalent flooding risk facing Kinglassie. The main source of flooding in Kinross is from surface water and river flooding from the South Queich, the Gelly Burn and the Clash Burn. The main source of flooding in Milnathort is river flooding from the Back Burn, however there is also a risk of surface water flooding.

There are three target areas within this potentially vulnerable area, which have been the focus of further assessment. These are listed below. Further information on the objectives and actions to manage flood risk within this area is provided below.

List of target areas

Kinross (target area 239)

Milnathort (target area 303)

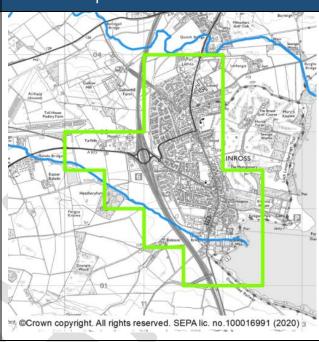
Local Flood Risk Management plan datasheet

Kinross (target area 239)

Summary

The town of Kinross is located around 20km south of Perth. The main sources of flooding in Kinross are surface water and river flooding from the South Queich, Gelly Burn and Clash Burn. The local authority has carried out a flood study in this area in support of the proposed flood scheme. The study indicates that 129 homes and 55 businesses are currently at risk of flooding from the South Queich, the Gelly Burn and the Clash Burn.

Location Map



Current understanding of Flood Risk

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national assessments of flooding from rivers, surface water and coastal sources. The national assessment for river flooding is improved by flood study work supporting the ongoing development of proposals for the South Kinross Flood Protection Scheme. The understanding of surface water flooding was also improved by Scottish Water's sewer flood risk assessment.

There is a long record of flooding in this target area. Flooding occurred in January 1993, January 1999, December 2006, January and August 2008 and November 2009. In February 2020 a number of homes and roads suffered river flooding. Most recently, flooding was recorded in August 2020 when homes flooded as a result of unprecedented rainfall in the area.

Objective	ID	Description
Avoid flood risk	2391	Avoid inappropriate development that increases flood risk in Kinross
Avoid flood risk	2392	Avoid an increase in flood risk by the appropriate management and maintenance of the South Kinross Flood Protection Scheme

Prepare for flooding	2393	Prepare for current flood risk and future flooding as a result of climate change in Kinross
Reduce flood risk	2394	Reduce the risk of river flooding from the South Queich, Gelly Burn and Clash Burn in South Kinross
Reduce flood risk	2395	Reduce the risk of surface water flooding in Kinross

Action ID	Kinross		23901	
Action Type	Flood Protection Scheme			
Action Delivery Lead	Perth and Kinross Council	Indicative Delivery	2022 - 2025	
Description	The development of the outline design for the South Kinross Flood Protection Scheme will continue and will consider long term flood risk and climate change. The development of the proposals will also be informed by community engagement. The scheme will then progress to the statutory process set out under the Flood Risk Management (Scotland) Act 2009. The detailed design will be completed thereafter.			
	Following completion of the detailed design, the proposed scheme will be procured and will progress to construction.			
	As built drawings will be made available to SEPA, for inclusion in the Scottish Flood Defence Asset Database, flood map updates and flood warning scheme updates.			
Funding	available capital fund the Scottish Govern	ding (up to 80% capit	eme will be subject to tal grant funding from aining funding being capital programme).	
Coordination		s Flood Protection the Forth Estuary	n Scheme will be Local Plan District	

Action ID	Kinross	23902			
Action Type	Maintain Flood Protection Scheme				
Action Delivery Lead	Perth and Kinross Council	On-going			
Description	Once built, Perth and Kinross Council will implement an inspection and maintenance regime for the South Kinross Flood Protection Scheme.				
Funding	The maintenance of flood protection schemes will be subject to funding from Perth and Kinross Council's revenue budget.				

Action ID	Kinross	23903		
Action Type	Sewer Flood Risk A	ssessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2023 - 2025	
Description	Scottish Water will undertake a modelling assessment in the Kinross sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009			
Funding	Funding for this action is secured within Scottish Water's business plan.			
Coordination	Outputs of this modelling assessment will be shared with local authorities and SEPA.			

Action ID	Kinross 23904			
Action Type	Surface Water Management Plan			
Action Delivery Lead	Perth and Kinross Indicative Delivery 2024 - 2026 Council			
Description	Perth and Kinross Council will develop a surface water management plan for Kinross. This will improve the understanding of surface water flood risk, and in the longer term look at possible action to manage the risk. The results of the sewer flood risk assessment will be considered. Current and long term flood risk will be considered and if climate change impacts are found to be significant, surface water management will include adaptive planning.			
Funding	The surface water management plan will be subject to funding from Perth and Kinross Council's revenue budget.			
Coordination	The surface water management plan is programmed to commence in the 2024/25 financial year. Perth and Kinross Council will engage consulting engineers to investigate the surface water flood risk and identify potential options for managing that risk. The surface water management plan will be coordinated through the Forth Estuary Local Plan District Partnership.			
	Scottish Water will work with and support surface water management planning through ensuring that best available			

knowledge	and	data	is	used	to	input	into	the	surface	water
manageme	nt pla	ans.								

Action ID	Kinross	23905			
Action Type	Community Engagement				
Action Delivery Lead	SEPA and Responsible Authorities	Indicative Delivery	On-going		
Description	Community engagement will continue in connection with ongoing projects and activities. This will include engaging with the community on the development of the flood scheme proposals and the surface water management plan (Action ID's 23901 & 23904).				
Funding	Community engagement activities will be subject to funding from Perth and Kinross Council's revenue budget. SEPA's community engagement activities are funded by the Scottish Government through SEPA's grant in aid settlement. Scottish Water is funded by customer charges as set by their economic regulator; all business activities required under this action by Scottish Water are accounted for in their capital or operational expenditure.				
Coordination	The action delivery lead is Perth and Kinross Council. Awareness raising and community engagement will take place around any projects and will be coordinated through the Local Plan District Partnership.				

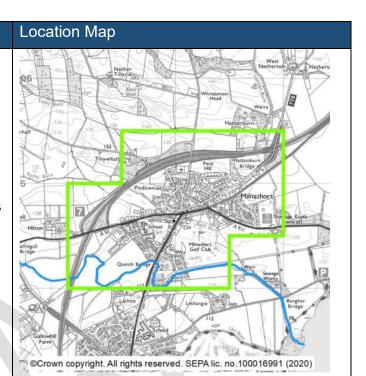
Action ID	Kinross	23906			
Action Type	Community Resilience Group				
Action Delivery Lead	Community	On-going			
Description	Perth and Kinross Council will continue to liaise with the Kinross Flood Resilience Group.				
Funding	Funding for Community resilience groups will be provided by private individuals, businesses, organisations or communities at risk of flooding.				
Coordination	Perth and Kinross Council will work with the Kinross Flood Resilience Group to reduce flood risk, improve preparedness and increase resilience against flooding. The Council will continue to co-ordinate with the Kinross Flood Resilience Group on a priority needs basis where resources allow.				
	The Council will coo any related actions.	The Council will coordinate community resilience groups with any related actions.			

Local Flood Risk Management plan datasheet

Milnathort (target area 303)

Summary

Milnathort is a small town in Perth and Kinross located just north of Kinross. The main source of flooding in Milnathort is river flooding, however there is also a risk of surface water flooding. There are approximately 200 people and 130 properties currently at risk from flooding. This is likely to increase to 300 people and 180 properties by the 2080s due to climate change. A flood protection scheme is in place in the area, protecting homes and businesses to a 1 in 100 year standard of protection.



Current understanding of Flood risk

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national assessments of flooding from rivers, surface water and coastal sources. The national assessment for surface water is improved by an on-going surface water management plan, a sewer flood risk assessment and flood study work in support of a proposed surface water flood protection scheme. National understanding of river flooding is improved by flood study work carried out for the existing Milnathort Flood Protection Scheme on the Back Burn.

There is a long record of flooding in this area. The Back Burn flooded in January 1993, affecting properties in the town centre. In December 2006 a prolonged period of heavy rainfall caused flooding to houses and a local pub, necessitating residents to be evacuated from their homes. The most recent significant flood was recorded in July 2013 when surface water flooded a number of homes and businesses. Since then, smaller scale surface water flooding occurred in 2020 but did not cause any damage to properties.

Objective	ID	Description
Avoid flood risk	3031	Avoid inappropriate development that increases flood risk in Milnathort
Avoid flood risk	3032	Avoid an increase in flood risk by the appropriate management and maintenance of the flood protection schemes in Milnathort
Prepare for flooding	3033	Prepare for current flood risk and future flooding as a result of climate change in Milnathort
Reduce flood risk	3034	Reduce the risk of surface water in Milnathort

Action ID	Milnathort	30301
Action Type	Flood Protection Scheme	
Action Delivery Lead	Perth and Kinross Indicative Delivery Council	2022 - 2025
Description	The development of the outline design Surface Water Flood Protection Scheme consider long term flood risk and of development of the proposals will be infleengagement. The scheme will then proposes set out under the Flood Risk Market. The detailed design will be complete Following completion of the detailed descheme will be procured and will progress	will continue and will limate change. The ormed by community gress to the statutory magement (Scotland) ed thereafter.
	As built drawings will be made available to the Scottish Flood Defence Asset I updates and flood warning scheme updates	Database, flood map
Funding	The Milnathort Surface Water Flood Protesubject to available capital funding (upfunding from the Scottish Government funding being provided from Perth & Kinprogramme).	to 80% capital grant with the remaining
Coordination	The Milnathort Surface Water Flood Pr continue to be coordinated through the Plan District Partnership.	

Action ID	Milnathort		30302
Action Type	Maintain Flood Protection Scheme		
Action Delivery Lead	Perth and Kinross Council	Indicative Delivery	On-going

Description	Maintenance of the existing Milnathort Flood Protection Schemes (on the Back Burn) will continue in accordance with the inspection and maintenance regime.		
	Maintenance of the new Milnathort Surface Water Flood Protection Scheme will commence once construction of the scheme is complete.		
Funding	The maintenance of flood protection schemes will be subject to funding from Perth and Kinross Council's revenue budget.		
Coordination	Perth & Kinross Council's Roads Maintenance Partnership will maintain any existing flood protection schemes and works through a programme of inspections carried out in accordance with the recommendations set out in the scheme maintenance manuals. Maintenance works will be coordinated with SEPA, SNH, landowners and other stakeholders as required. The maintenance of the flood scheme/works will also be coordinated with related actions.		

Action ID	Milnathort		30303
Action Type	Sewer Flood Risk Assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024 - 2026
Description	Scottish Water will undertake a modelling assessment in the Milnathort sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009.		
Funding	Funding for this action is secured within Scottish Water's business plan.		
Coordination	Outputs of this modelling assessment will be shared with local authorities and SEPA.		

Action ID	Milnathort		30304
Action Type	Surface Water Management Plan		
Action Delivery Lead	Perth and Kinross Council	Indicative Delivery	2022 - 2023
Description	The development of a surface water management plan for Milnathort in on-going. This is being coordinated with the development of the proposed Milnathort Surface Water Flood Protection Scheme (Action ID 30301).		
	Current and long term flood risk is being considered and, if climate change impacts are found to be significant, the plan will consider how the area can adapt to increased flood risk in the future.		

Funding	The surface water management plan will be subject to funding from Perth and Kinross Council's revenue budget.
Coordination	Work to develop a surface water management plan is ongoing. Perth and Kinross Council engaged consulting engineers, Sweco UK Ltd, to investigate the surface water flood risk and identify potential options for managing that risk. The plan/study will be coordinated through the Forth Estuary Local Plan District Partnership.
	Scottish Water will work with and support surface water management planning through ensuring that best available knowledge and data is used to input into the surface water management plans.

Action ID	Milnathort		30305
Action Type	Community Engagement		
Action Delivery Lead	SEPA and Responsible authorities	Indicative Delivery	On-going
Description	Community engagement will continue in connection with ongoing projects and activities. This will include engaging with the community on the development of the flood scheme proposals and the surface water management plan (Action ID's 30301 & 30304).		
Funding	Community engagement activities will be subject to funding from Perth and Kinross Council's revenue budgets. SEPA's community engagement activities are funded by the Scottish Government through SEPA's grant in aid settlement. Scottish Water is funded by customer charges as set by their economic regulator, all business activities required under this action by Scottish Water are accounted for in their capital or operational expenditure.		
Coordination	Community engagement will be coordinated through the Local Plan District partnership between SEPA and the responsible authorities. SEPA and the responsible authorities will use any studies, projects and flood schemes to engage with communities and raise awareness of flood risk. Communications activity will be coordinated through existing		
	arrangements with Information will be d	nin Local Plan D	istrict Partnerships. website, social media